UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF CALIFORNIA

PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS, *et al.*, Plaintiffs, v. GINA RAIMONDO, *et al.*, Defendants.	Case No. 1:20-cv-00431 JLT EPG ORDER GRANTING IN PART REQUEST TO EXTEND INTERIM OPERATIONS PLAN; DENYING ALL OTHER ALTERNATIVE REQUESTS FOR RELIEF; DENYING MOTION TO STRIKE AS MOOT; AND CONTINUING STAY. (Docs. 482, 492, 497, 506, 508)
THE CALIFORNIA NATURAL RESOURCES AGENCY, *et al.*, Plaintiffs, v. GINA RAIMONDO, *et al.*, Defendants.	Case No. 1:20-cv-00426 JLT EPG ORDER GRANTING IN PART REQUEST TO EXTEND INTERIM OPERATIONS PLAN; DENYING ALL OTHER ALTERNATIVE REQUESTS FOR RELIEF; DENYING MOTION TO STRIKE AS MOOT; AND CONTINUING STAY. (Docs. 336, 338, 354)

I. INTRODUCTION

These related cases involve challenges to a pair of "biological opinions" (BiOps) issued by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) in 2019 pursuant to the Endangered Species Act (ESA), 16 U.S.C § 1531 *et seq*. The 2019 BiOps

address the impact on various ESA-listed species of implementing an updated plan issued by the U.S. Bureau of Reclamation (Reclamation) and California's Department of Water Resources (DWR) for the long-term operation of the Central Valley Project (CVP) and the State Water Project (SWP) (collectively, "Water Projects" or "Proposed Action"). FWS's 2019 BiOp addresses Water Project impacts on the ESA-listed delta smelt; NMFS's 2019 BiOp addresses impacts on various other aquatic species, including several salmonid species discussed in this order.

Plaintiffs[1] in both cases allege that NMFS and FWS violated the Administrative Procedure Act (APA), 5 U.S.C. § 706, in various ways by concluding that the Water Projects would not jeopardize the continued existence of the ESA-listed species addressed in each biological opinion. (*PCFFA* Doc. 52; *CNRA* Doc. 51.)[2] Both sets of Plaintiffs also bring claims against Reclamation under the ESA and the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq*, challenging Reclamation's adoption and implementation of the Proposed Action (*Id*.)[3] The State Plaintiffs' complaint in *CNRA* also alleges that Reclamation has violated the APA by failing to comply with the California Endangered Species Act (CESA), conformance with which State Plaintiffs maintain is required by various provisions of federal law. (*CNRA* Doc. 51 (*CNRA* FAC), ¶¶ 145–54.)

In late 2021 and early 2022, when this case was assigned to U.S. District Judge Dale A. Drozd, the parties briefed a highly complex set of motions, including motions for voluntary remand without vacatur, a request made by Federal Defendants and State Plaintiffs to impose a stipulated package of interim injunctive relief measures in the *CNRA* case that would govern

[1] Plaintiffs in *Pac. Coast Fed'n of Fishermen's Ass'ns v. Ross*, 1:20-cv-00431-JLT-EPG (*PCFFA*), are a coalition of six environmental organizations (collectively referenced herein as "PCFFA"). Plaintiffs in *Cal. Natural Res. Agency v. Ross*, No. 1:20-cv-00426-JLT-EPG (*CNRA*), are the People of the State of California, California's Natural Resources Agency, and California's Environmental Protection Agency (State Plaintiffs).

[2] Hereinafter, the Court will omit the "*PCFFA*" designation from record documents in that case but will continue to distinguish documents of record in the *CNRA* case by retaining the "*CNRA*" designation when citing documents from *CNRA*.

[3] Collectively, NMFS, FWS, and Reclamation, along with the individual named heads of those agencies, are referenced as "Federal Defendants."

operations for the remainder of the 2022 "Water Year" (WY)[4], and what was effectively a cross-motion filed by PCFFA to impose a competing package of interim injunctive measures. In a 122-page, detailed order issued on March 11, 2022, Judge Drozd granted the motion for voluntary remand without vacatur of the challenged BiOps, approved the stipulated interim operations plan (2022 IOP), denied PCFFA's competing injunctive relief requests, and stayed the case through September 30, 2022. (Doc. 394 (2022 IOP Order).)

The parties filed status reports toward the end of WY 2022. (Docs. 404–406.) Recognizing that the remand (and associated revisions to the BiOps and related documents) is not anticipated to be complete until 2024 (*see* Doc. 406 at 3), Federal Defendants and State Plaintiffs proposed extending the IOP (the 2023 IOP), with some modifications, through December 31, 2023. (*See generally* Doc. 406.) On February 24, 2023, the Court approved the proposed 2023 IOP, rejected all alternative forms of relief, and continued the stay of these matters through December 31, 2023. (Docs. 462 (2023 IOP Order), 463.)

As instructed by the Court, in mid-November 2023, the parties filed a joint status report that once again reiterated that remand is not anticipated to be complete until late 2024 (*see* Doc. 482 at 4) and proposing a schedule that would allow the Court to consider a request to extend the IOP for an additional year. (Doc. 467.) The Court issued a briefing schedule (Doc. 479) and shortly thereafter continued the operation of the 2023 IOP and the stay through the end of March 2024 (Doc. 483). The final briefs were filed in early March 2024[5] and the parties all agreed that no evidentiary hearing was needed. (Doc. 503.) Having considered the filings submitted by all parties (Docs. 482, 485–96, 500–501, 504–510; *CNRA* 338, 348) and the entire extensive record, the Court **GRANTS IN PART** the motion to extend the IOP (Doc. 482); **DENIES** all other proposed forms of interim relief; **DENIES AS MOOT** Federal Defendants' motion to strike (Doc. 508); and **CONTINUES the STAY** of these cases through the issuance of a new Record of Decision or December 20, 2024, whichever is first.

[4] A "Water Year" runs from October 1 of the preceding calendar year through September 30 of the current calendar year. (*See* 11/23/21 Grober Decl., *CNRA* Doc. 223, ¶ 26.)

[5] Documents continued to be filed through the end of March, including a motion to strike, response, and reply. (Docs. 508–10.)

II. BACKGROUND[6]

In the interest of expedience, the Court provides here only that background information which is most essential to explaining and understanding its reasoning herein. The 2022 and 2023 IOP Orders provide additional, highly detailed background. To fully understand the reasoning presented below, a review of those prior orders is recommended.

A. The Endangered Species Act[7]

"Under the ESA, the Secretary of the Interior and the Secretary of Commerce are charged with identifying threatened and endangered species and designating critical habitats for those species." *Nat. Res. Def. Council v. Jewell*, 749 F.3d 776, 779 (9th Cir. 2014) (*NRDC v. Jewell*) (citing 16 U.S.C. § 1533). FWS and NMFS administer the ESA on behalf of the Departments of the Interior and Commerce, respectively. *See* 50 C.F.R. §§ 17.11, 222.101(a), 223.102, 402.01(b). Most pertinent to these cases is Section 7 of the ESA. 16 U.S.C. § 1536 (Section 7). Section 7(a)(2) imposes a procedural duty on the federal agencies to consult with the FWS or NMFS, depending on the protected species,[8] to "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of critical habitats of listed species. 16 U.S.C. § 1536(a)(2). An agency "action" is defined to mean all activities carried out by federal agencies, including, among other things, the granting of licenses and permits. *See* 50 C.F.R. § 402.02. "If a contemplated agency action may affect a listed species, then the agency must consult with the Secretary of the Interior, either formally or informally." *Am. Rivers v.*

[6] For simplicity and to ensure clarity of the record, the Court refers to declarations by their date, followed by the declarant's last name. The first time any declaration is referenced, the Court has endeavored to provide the Docket Number.

[7] Though other statutes are implicated in these cases, the ESA forms the core of the parties' arguments and therefore is the focus of the court's attention. Relevant aspects of other statutes are discussed as necessary.

[8] Generally, FWS has jurisdiction over species of fish that either (1) spend the major portion of their life in fresh water, or (2) spend part of their lives in estuarine waters, if the remaining time is spent in fresh water. *See Cal. State Grange v. Nat'l Marine Fisheries Serv.*, 620 F. Supp. 2d 1111, 1120 n. 1 (E.D. Cal. 2008), *as corrected* (Oct. 31, 2008). NMFS is granted jurisdiction over fish species that (1) spend the major portion of their life in ocean water, or (2) spend part of their lives in estuarine waters, if the remaining portion is spent in ocean water. *Id.* Relevant to the cases before the court, FWS exercises jurisdiction over the delta smelt; NMFS exercises jurisdiction over the winter-run and spring-run and the CV steelhead.

NMFS, 126 F.3d 1118, 1122 (9th Cir. 1997).

Formal consultation results in the issuance of a BiOp by the relevant wildlife agency (FWS or NMFS). *See* 16 U.S.C. § 1536(b). If the BiOp concludes that the proposed action would jeopardize the species or destroy or adversely modify critical habitat, *see id*. § 1536(a)(2), then the action may not go forward unless the wildlife agency can suggest a "reasonable and prudent alternative[]" (RPA) that avoids jeopardy, destruction, or adverse modification. *Id*. § 1536(b)(3)(A). If a BiOp concludes that the proposed action (or the action implemented in conjunction with actions described in the RPA) will cause incidental taking of protected species, but that despite this taking, the action will not jeopardize the species or threaten critical habitat, the wildlife agency

> shall provide the Federal agency and the applicant concerned, if any with a written statement that—
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> (i) specifies the impact of such incidental taking on the species,
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> (ii) specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact,
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> (iii) . . . , and
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> (iv) sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or applicant (if any), or both, to implement the measures specified under clauses (ii) and (iii).

Id. § 1536(b)(4). This required written statement, with its "reasonable and prudent measures" (RPMs) and associated terms and conditions, is referred to as an "Incidental Take Statement" (ITS), which, if followed, exempts the action agency from the prohibition on takings found in Section 9 of the ESA. *Id*. § 1536(o); *Aluminum Co. of Am. v. Adm'r, Bonneville Power Admin.*, 175 F.3d 1156, 1159 (9th Cir. 1999).

B. Listed Species at Issue

The winter-run and spring-run Chinook salmon (*Oncorhynchus tshawytscha*), and California Central Valley (CV) steelhead (*Oncorhynchus mykiss*), are "anadromous" fish, meaning that they live most of their lives in salt water, but "are born, mature, lay eggs, and often die in inland freshwater lakes and rivers." *San Luis & Delta-Mendota Water Auth. v. Locke*, 776

F.3d 971, 986–87 (9th Cir. 2014) (*San Luis v. Locke*).

> After they grow from fry (baby fish) to smolts (juvenile fish) in fresh water, anadromous salmon outmigrate through rivers and deltas into the oceans and seas where they will spend most of their adult lives. When it is time to reproduce, these salmon migrate back through the deltas to the rivers and lakes in which they were born to lay eggs. During this migration, salmon must pass impediments in inland rivers such as locks, dams, channels, and pumps.

Id. at 987.

Winter-run Chinook salmon (winter-run) are listed as endangered under the ESA. (Doc. 85-2 (2019 NMFS BiOp) at p. 65[9].) Before construction of Shasta Dam, the winter-run had access to the Sacramento River upstream of Shasta Dam's present location and to the upper tributaries where springs provided cold water throughout the summer. (*Id.* at pp. 69–70.) Shasta Dam and Keswick Dam (a smaller, regulating dam that sits nine miles downstream of Shasta) now block access to this extensive former spawning habitat of the winter-run. (*Id*. at p. 70.) As a result, the only wild population of winter-run spawns exclusively in the reaches of the Upper Sacramento River below Keswick Dam and this "single population . . . has been supported by cold water management operations at Shasta Dam." (*Id*.) Generally, winter-run adults migrate upstream through the San Francisco Bay-Delta region during the winter and spring months and spawn in the upper Sacramento River in the summer months. (*Id*. at pp. 70–71.) The ocean stage of the winter-run life cycle typically lasts three years. (*PCFFA*, Doc. 85-18 (2009 NMFS BiOp) at p. 87.)[10]

The Delta smelt (*Hypomesus transpacificus*) is a "small, two-to-three inch species of fish endemic to the San Francisco Bay/Sacramento–San Joaquin Delta Estuary [(Delta)]." *San Luis & Delta-Mendota Water Auth. v. Jewell*, 747 F.3d 581, 595 (9th Cir. 2014) (*San Luis v. Jewell*). In 1993, FWS concluded the Delta smelt's population had declined by ninety percent over the previous twenty years and listed it as a "threatened" species under the ESA. Determination of Threatened Status for the Delta Smelt, 58 Fed. Reg. 12,854, 12,855–56 (Mar. 5, 1993).

[9] Where the Court references a record document's internal pagination, it refers to the page as "p. __." Otherwise, page references are to the .pdf page reference provided by the Court's CM/ECF system.

[10] Spring-run Chinook salmon and CV steelhead—species discussed at some length in the 2022 IOP Order—are not focal points of the analysis herein.

The Longfin smelt (*Spirinchus thaleichthys*) is a small translucent silver fish with olive-to-grayish-brown markings and pinkish iridescence. (*CNRA* FAC, ¶ 38.) Longfin smelt exhibit a predominantly two-year life cycle and reach lengths of 90–124 mm, though some live a third year and grow somewhat larger. (*Id*.) They are known to inhabit the entire San Francisco estuary. (*Id*.) Larvae hatch during the coldest water temperatures of the year, become abundant in January, typically peak in February, and decline March through May. (*Id*., ¶ 39.) Mature fish migrate upstream to Suisun Bay and the western Sacramento-San Joaquin Delta in preparation for spawning. (*Id*.) According to the *CNRA* FAC: "Water quality in the longfin smelt incubation and early nursery areas of the Sacramento-San Joaquin Delta and Suisun Bay is critical for the San Francisco estuary population. Eggs, larvae, and small juvenile longfin smelt require adequate winter-spring river flows from spawning habitat and require suitable brackish-water rearing habitat." (*Id*.)

The Longfin smelt population has experienced a "long term declining trend" in abundance, with data suggesting a relationship between higher abundance and higher outflow. (12/22/23 Baxter Decl., Doc. 482-7, ¶¶ 11-13.) [11] Longfin smelt have been listed under CESA since 2009, Cal. Code Regs. tit. 14, § 670.5(b)(2)(E), and were formally proposed for listing under the ESA on October 7, 2022, 87 Fed. Reg. 60957 (Oct. 7, 2022). As of the date of this Order, listing under the federal ESA has not been finalized.

Given the pending listing, Federal Defendants indicate they are conferring with FWS on the CVP's effects on longfin smelt in a process called "conferencing" as part of the ongoing remand. *See* 50 C.F.R. § 402.10; (*see* also 12/22/23 White Decl., Doc. 482-3, ¶ 13). Under this procedure, if FWS has not made a final listing determination when the reinitiated CVP consultation concludes, then FWS will provide the results of the conference so that it may later be adopted as the biological opinion and incidental take statement for Longfin smelt if the species ultimately is listed under the ESA. 50 C.F.R. § 402.10(d)-(e). If Longfin smelt are listed before

[11] Defendant Intervenors' declarant, Dr. Hanson, indicates that there has been a "substantial decline" in the correlation between Longfin abundance and outflow, (Hanson 1/31/24 Decl., Doc. 486, ¶ 18), but nonetheless does not dispute the existence of a correlation. The Court agrees with State plaintiffs that this is ultimately a dispute over the magnitude of the correlation. (*See* Doc. 348 at 8.)

the remand, then FWS may cover the species in the biological opinion and incidental take statement in accordance with 50 C.F.R. § 402.14. (*See also* 12/22/23 Allen Decl., Doc. 482-5, ¶ 8.)

C. Overview of the Water Projects and Impacts on Listed Species

The CVP and the SWP, "operated respectively by [Reclamation] and the State of California, are perhaps the two largest and most important water projects in the United States." *San Luis v. Jewell*, 747 F.3d at 592. "These combined projects supply water originating in northern California to more than 20,000,000 agricultural and domestic consumers in central and southern California." *Id.* As one part of CVP operations, Reclamation releases water stored in CVP reservoirs in northern California; this water then flows down the Sacramento River to the Delta. *See id*. at 594. Pumping plants in the southern region of the Delta (South Delta) then divert the water to various users south of the Delta. *See id*. at 594–95.

"Although the [Water] Projects provide substantial benefits to people and to state agriculture, they arguably harm species native to the Delta by modifying those species' natural habitats." *San Luis v. Locke*, 776 F.3d at 986. The Water Projects do so in several ways. First, as mentioned, the dams that make the CVP and SWP possible have blocked access to the colder water upstream spawning and rearing habitat of migratory fish species. *Nat. Res. Def. Council v. Norton*, 236 F. Supp. 3d 1198, 1204 (E.D. Cal. 2017) (*NRDC v. Norton*). This has limited (and in some cases all but eliminated) spawning and rearing habitat for these species and confined certain populations to spawning areas where flows and temperatures are largely controlled by releases from upstream dams. *See id*.

In addition, the Water Projects pump fresh water out of the "Old and Middle River" (OMR) branches of the San Joaquin River in volumes sufficient to reverse the flow in OMR. *Id*. at 996. "Absent pumping, [these] rivers would flow north into the Delta.[12] Under pumping

[12] The hydrodynamics of the Delta are highly complex and are influenced by, among other things, inflow from the various watersheds that drain into the Delta, Water Project actions, and tidal influences. (*See* 2019 NMFS BiOp at p. 148 ("There are two primary categories of effects in the south Delta due to water export: (1) salvage and entrainment at the south Delta export facilities, and (2) water-project-related changes to south Delta hydrodynamics that may reduce the suitability of the south Delta for supporting successful rearing or migration of salmonids and sturgeon from increased predation probability and exposure to poor water quality conditions. Key water-project-related drivers of south Delta hydrodynamics are Vernalis inflow, CVP and SWP exports from the south Delta export facilities and

operations, the rivers flow south to the [CVP's] Jones and [SWP's] Banks pumping plants." *San Luis v. Locke*, 776 F.3d at 986. Listed species—particularly juveniles—can be caught in the negative current and drawn towards the pumping facilities. *Id*. Some of these fish are "salvaged" at the pumps, "meaning they are diverted from the fatal pumping plants to fish salvage facilities and into tanks where they are counted, measured, loaded into trucks, driven north, and dumped back into the Delta." *Id*. But even if salvaged, fish that are drawn towards the pumps by the "negative OMR" flow have a lower likelihood of surviving outmigration than their counterpoints that avoid "entrainment"[13] by Water Project operations. *Id*. "The collection of fish of concern at the export facilities is a clear indicator that fish have been diverted from their migratory paths into the channels of the south Delta." (11/23/21 Herbold Decl., *CNRA Doc. 224*, ¶ 39.) For example, when the Delta smelt was listed as endangered, "Delta water diversions," including those resulting from operations of the CVP and SWP, were deemed a significant "synergistic cause[ ]" of the decline in the population. 58 Fed. Reg. at 12,859.

D. 2008/2009 Biological Opinions

The Water Projects have undergone numerous rounds of review under the ESA, resulting in BiOps issued by FWS and NMFS that have imposed various forms of regulatory constraints upon Water Project operations. These BiOps have also been the subject of numerous lawsuits that form the backdrop for the present disputes.

A 2008 FWS BiOp concluded that "CVP/SWP operations have entrained smelt, including adults, larvae, and juveniles, at the Banks and Jones facilities; reduced smelt habitat; and reduced [ ] Delta outflows, altering the location of the [Low Salinity Zone][14]." *Id*. at 598. The 2008 FWS

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construction of agricultural barriers; these drivers interact with tidal influences over much of the central and southern Delta. In day-to-day operations, these drivers are often correlated with one another (for example, exports tend to be higher at higher San Joaquin River inflows) and regulatory constraints on multiple drivers may simultaneously be in effect.").)

[13] "Entrainment consists of two parts; the capture of fish at the export facilities' fish screens and the much larger, but uncounted, loss of fish diverted off their migratory paths and into channels of the south Delta where predation is high." (11/23/21 Herbold Decl., *CNRA* Doc. 224, ¶ 39.)

[14] "Two related standards are used to describe the salinity of the Bay–Delta. The first is the Low Salinity Zone or LSZ. The LSZ is the transition point between the freshwater of the inland rivers and brackish water flowing eastward from San Francisco Bay and the Pacific Ocean and includes water ranging in salinity from 0.5 parts per thousand to six parts per thousand. The second is referred to as X2. X2 represents the point in the Bay–Delta at which the salinity

BiOp recommended a suite of actions (a reasonable and prudent alternative, or "RPA" in the parlance of the ESA) designed to protect against the harm the water projects would otherwise cause to delta smelt. (*See* Doc. 85-17 (2008 FWS BiOp) at pp. 279–85.) That RPA included measures to limit how "negative" OMR flows could become and other actions designed to provide sufficient Delta outflow to maintain Delta smelt habitat conditions. (*See id*. at pp. 281–83.)

Similarly, an NMFS 2009 BiOp concluded that "the long-term operations of the CVP and SWP are likely to jeopardize the continued existence" of and "destroy or adversely modify" critical habitat for winter-run, spring-run, and CV steelhead. (*See* 2009 NMFS BiOp at p. 575.) That BiOp also included an RPA designed to allow the projects to continue operating without causing jeopardy to the species or adverse modification to its critical habitat. (*Id*. at pp. 575–671.) The 2009 NMFS BiOp provided a succinct overview of that 2009 NMFS RPA, pertinent parts of which provide helpful background here:

> Water operations result in elevated water temperatures that have lethal and sub-lethal effects on egg incubation and juvenile rearing in the upper Sacramento River. The immediate operational cause is lack of sufficient cold water in storage to allow for cold demands. This elevated temperature effect is particularly pronounced in the Upper Sacramento for winter-run and mainstem spring-run, and in the American River for steelhead. The RPA includes a new year-round storage and temperature management program for Shasta Reservoir and the Upper Sacramento River . . . .
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> [W]ater pumping causes reverse flows, leading to loss of juveniles migrating out from the Sacramento River system in the interior Delta and more juveniles being exposed to the State and Federal pumps, where they are salvaged at the facilities. The RPA prescribes Old and Middle River flow levels to reduce the number of juveniles exposed to the export facilities and prescribes additional measures at the facilities themselves to increase survival of fish.

(*Id*. at pp. 576–77.)[15]

E. Temperature Management at Shasta Dam under the 2009 NMFS BiOp

Generally, temperature management below Shasta/Keswick Dams involves the release of

is less than two parts per thousand." *San Luis v. Jewell*, 747 F.3d at 595 (internal record citations omitted).

[15] The 2008 FWS and 2009 NMFS BiOps were the subject of numerous lawsuits but were ultimately upheld by the Ninth Circuit. *See San Luis v. Jewell*, 747 F.3d 581; *San Luis v. Locke*, 776 F.3d 971.

cold water to meet target temperatures at various temperature compliance points (TCPs) along the Sacramento River. Keswick Dam is located at River Mile 302. (Doc. 85-12, at p. 2–13.) The farthest upstream TCP identified in the 2009 NMFS BiOp is Clear Creek (about 10 river miles below Keswick), then Airport Road Bridge (15 river miles below Keswick), Balls Ferry (25 river miles below Keswick), and Bend Bridge (44 river miles below Keswick). (*Id*.) The general purpose of these TCPs is to keep water temperatures cool enough to avoid damaging salmon eggs, a phenomenon known as "temperature-dependent mortality" (TDM). (*See* Doc. 85-12 at 4-29; 3/5/20 Rosenfield Decl., ¶ 138.)

NMFS's 2009 BiOp required Reclamation to develop a temperature management plan (TMP) by May 15 of each year and to implement Shasta Dam operations so as to achieve daily average water temperatures not to exceed 56°[F] between Balls Ferry and Bend Bridge from May 15 through September 30 for the protection of winter-run, and not in excess of 56°[F] between Balls Ferry and Bend Bridge from October 1 through October 31 for the protection of spring-run in the mainstem Sacramento River "whenever possible." (2009 NMFS BiOp at p. 601.) The 2009 NMFS RPA acknowledged that "extending the range of suitable habitat by moving the compliance point downstream from Balls Ferry" must be balanced against the need to conserve storage so to accumulate a sufficient cold water pool for use during the subsequent temperature management season. (*Id*. at 602.)

The 2009 NMFS BiOp also addressed practices related to how much water would be carried over in storage at Shasta Reservoir from one year to the next, a concept termed "carryover storage," that is often referred to as "end-of September" or "EOS" storage. It first explained the pre-existing approach to carryover storage:

> Before the TCD was built, NMFS required that a 1.9 [million acre feet ("MAF")][16] end-of-September (EOS) minimum storage level be maintained to protect the cold water pool in Shasta Reservoir, in case the following year was critically dry[17] (drought year insurance). This

[16] An acre foot of water is the volume of water required to cover one acre of surface area to the depth of one foot, or approximately 43,560 cubic feet. *United States v. Westlands Water Dist*., 134 F. Supp. 2d 1111, 1139 n. 61 (E.D. Cal. 2001).

[17] Water Project managers use various scales to describe hydrologic conditions. The most commonly referenced in this case is the water year type designation for the Sacramento Valley, which is determined by a formula set forth in

> was because a relationship exists between EOS storage and the cold water pool. The greater the EOS storage level, typically the greater the cold water pool. The requirement for 1.9 MAF EOS was a reasonable and prudent alternative (RPA) in NMFS' winter-run opinion (NMFS 1992). Since 1997, Reclamation has been able to control water temperatures in the upper Sacramento River through use of the TCD. Therefore, NMFS changed the RPA to a target, and not a requirement, in the 2004 CVP/SWP operations Opinion.

(*Id*. at p. 250.) The 2009 NMFS BiOp continued this approach, setting forth EOS carryover storage targets in the RPA, with the lowest target being 1.9 MAF in the driest category of years, and delineating steps Reclamation must take if the various targets cannot be reached. (*See generally id*. at pp. 590–603.) The 2009 NMFS BiOp estimated that—based on then-available information—the 1.9 MAF target would not be met in 10% of years. (*Id*. at p. 250.) The 2009 RPA also provided drought exception procedures and contingency plans if these temperatures and carryover storage targets could not be achieved. (*Id*. at p. 600.)

F. Loss of Temperature Control in 2014 and 2015

In 2014, California was in the third year of a drought. (2019 NMFS BiOp at p. 69.) According to PCFFA's expert, Dr. Jonathan Rosenfield, early in 2014, Reclamation moved the temperature compliance point "far upstream above Clear Creek's confluence with the Sacramento River," predicting it could provide required water temperatures to that point. (3/5/20 Rosenfeld Decl., Doc. 82, ¶ 171.) However, despite initial modeling that indicated compliance was possible and despite Reclamation obtaining various waivers from state Delta outflow requirements that it asserted were necessary to maintain appropriate water temperatures, river temperatures at the revised temperature control point exceeded 56°F. (*Id.*) This resulted in temperature-dependent egg mortality in 2014 of 77% (*id*.) and extremely poor egg-to-fry survival (measured as the percentage of eggs that survived to produce fry capable of passing the Red Bluff Diversion Dam on the lower Sacramento River) of approximately 4%. (2019 NMFS BiOp at p. 69.)

This unfortunate story repeated in 2015. (*See* 3/5/20 Rosenfield Decl., ¶ 172.) Winter run egg-to-fry survival that year was the lowest on record (approximately three percent), "due to the

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California State Water Resources Control Board Decision 1641 on page 188. As State Plaintiffs' expert witness Les Grober has explained: "There are five year types: critically dry, dry, below normal, above normal, and wet." (11/23/21 Grober Decl., ¶ 26 n. 8.) There is also a separate water year type designation for the San Joaquin River watershed. (*See* 2/10/22 Conant Decl., Doc. 451-1, Attachment.)

inability to release cold water from Shasta Dam in the fourth year of the drought." (*Id*.) As a result, and as the 2019 NMFS BiOp explains, "[w]inter-run [] returns in 2016 to 2018 were low, as expected, due at least in part to poor in-river conditions for juveniles from brood year 2013 to 2015 during drought years." (*Id*.) Although "[t]he 2018 adult winter-run return (2,639) improved from 2017 (977)," it was "dominated by hatchery-origin fish." (*Id*.)

In 2016, after the years of drought and concerns over extremely low population numbers of winter-run and Delta smelt, FWS and NMFS reinitiated consultation under the ESA. (*See* Docs. 85-4, 85-5.) Reclamation specifically acknowledged the precarious situation of the winter-run and Delta smelt in its requests for re-initiation of consultation. (*Id*.)

G. 2019 Biological Opinions

In January 2019, Reclamation issued a biological assessment (BA)[18] for the Proposed Action. (*See* 2019 NMFS BiOp at p. 12.) Pursuant to the ESA, Reclamation again consulted with FWS and NMFS. (*See id*.)

In July 2019, NMFS prepared a draft BiOp in which the agency concluded that, absent constraints, the Reclamation's proposed plan as set forth in the January 2019 BA was likely to jeopardize the continued existence of, and destroy or adversely modify the critical habitat of, the listed salmonid species. (Doc. 85-13.) Thereafter, Reclamation and DWR incorporated changes to the proposed plan, including additional commitments to address impacts to listed species. (*See* 2019 NMFS BiOp at pp. 12–14.)

A few months later, on October 21, 2019, Reclamation issued a revised, Final BA describing a revised operating plan for the Water Projects (Doc. 85-12), which constituted the final Proposed Action. On the same day, NMFS issued a BiOp that concluded Reclamation's revised proposed plan was not likely to jeopardize the existence of winter-run and spring-run

[18] Under the ESA, an agency proposing to take an action (often referred to as the "action agency") must first inquire of FWS and/or NMFS whether any threatened or endangered species "may be present" in the area of the proposed action. *See* 16 U.S.C. § 1536(c)(1). If endangered species may be present, the action agency may prepare a BA to determine whether such species "is likely to be affected" by the action. *Id*.; 50 C.F.R. § 402.12(b). "An agency may avoid the consultation requirement only if it determines that its action will have 'no effect' on a listed species or critical habitat." *Karuk Tribe of Cal. v. U.S. Forest Serv*., 681 F.3d 1006, 1027 (9th Cir. 2012) (*en banc*) (internal citation omitted). If the BA determines that a threatened or endangered species is "likely to be affected," the agency must formally consult with FWS and/or NMFS. *See* 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14.

salmon and Central Valley steelhead beyond that permitted under its 2009 opinion. (*See* generally 2019 NMFS BiOp.) Following a very similar consultation pathway, FWS issued an opinion that Reclamation's proposed plan was not likely to jeopardize the continued existence of the Delta smelt or modify its habitat. (Doc. 85-1 (2019 FWS BiOp).) Having found no jeopardy, the BiOps imposed no additional protective conditions on the Proposed Action, which was allowed to proceed as described in Reclamation's Final BA. These related lawsuits followed.

H. Temperature Management at Shasta Dam under the 2019 NMFS BiOp[19]

The 2019 NMFS BiOp set forth a "tiered" Shasta temperature management strategy designed, at least facially, to account for the real-time spatial and temporal distribution of redds (egg clusters) to attempt to conserve cold water for use when it is most needed. A Reclamation witness described this tiered approach generally as follows.

> The tiered strategy recognizes that cold water is a scarce resource and that additional measures may be required when hydrology and meteorology do not provide sufficient cold water to avoid temperature dependent mortality throughout the entire temperature management period. The tiered strategy is intended to optimize use of cold water at Shasta for Winter-Run Chinook Salmon eggs based on life-stage-specific requirements during the temperature management season.

(3/26/20 White Decl., Doc. 119-1, ¶ 23 (citing Doc. 85-12 at 4-31 to 4-32).)

The 2019 NMFS BiOp concluded that the Clear Creek TCP serves as a reliable surrogate for controlling temperatures at the farthest downstream redd location. (*See* 2019 NMFS BiOp at pp. 173, 237.) The tiered strategy adopts the view that using cold water too early (i.e., before redds are deposited) and/or to meet a TCP too far downstream of the actual location of redds, wastes cold water that is needed later in the season during the critical incubation season. Thus, the tiered strategy hypothetically "allows for strategically selected temperature objectives," based on projected total storage, the available "cold water pool," meteorology, and downstream conditions (which can influence how much water Reclamation must release for other reasons), among other

[19] The Court recognizes that the 2019 BiOps evaluated, and approved, Water Project operations and protective measures as proposed by Reclamation and described in Reclamation's Proposed Action. Purely for ease of reference, however, the Court occasionally refers to the applicable regulatory constraints as stemming from the 2019 BiOps themselves.

things. (Doc. 85-12 at 4-28.)

The temperature targets for each "Tier" under the 2019 BiOps are as follows:

- In Tier 1 years, Reclamation will maintain daily average temperatures of 53.5°F at Clear Creek throughout the entire temperature management season (May 15 through Oct 30). (2019 NMFS BiOp at pp. 241–2.)
- In Tier 2, Reclamation will target 53.5°F at Clear Creek during the "critical egg incubation period." (*Id.* at p. 242.)
- Tier 3 is the proposed operation when the cold water pool in Shasta Reservoir on May 1 is less than 2.3 million acre-feet or when modeling suggests that maintaining 53.5°F at the Clear Creek TCP would have higher mortality than a warmer temperature. (*Id.*) In a Tier 3 year, Reclamation would target 53.5°–56° degrees at Clear Creek during the critical egg incubation period and would consider "intervention measures."[20] (*Id.*) Reclamation would not allow temperatures to exceed 56° but would decrease temperatures to below that during the periods of greatest temperature stress on the species. (*Id.*)
- Tier 4 conditions are "defined by mid-March storage and operations forecasts of Shasta Reservoir total storage less than 2.5 million acre-feet at the beginning of May, or if Reclamation cannot meet 56°F at Clear Creek gauge." (*Id.* at p. 243.) In Tier 4 years, Reclamation will "initiate discussions with FWS and NMFS on potential intervention measures to address low storage conditions that continue into April and May." (*Id.* at p. 243.)

Under the 2019 NMFS BiOp, temperature management planning begins in early February, when Reclamation prepares forecasts of water year runoff using precipitation to date, snow water content accumulations, and runoff. If, for example, May 1 storage is projected to be less than 2.5 MAF, Reclamation would initiate discussions on intervention measures for a Tier 4 year.

[20] The "[i]ntervention measures" referenced in the 2019 NMFS BiOp include "consulting with []FWS and NMFS, increasing hatchery intake, adult rescue, and juvenile trap and haul." (*Id.* at p. 249.) NMFS notes in the 2019 NMFS BiOp that "any benefits from implementation of these measures is not included in results presented [therein] due to their inability to be characterized by the modeling." (*Id.* at p. 243.)

Reclamation would then perform initial temperature modeling in early April, which is timed to coincide with the release of certain critical forecasts. This April temperature model scenario is then used to develop an initial TMP. After Reclamation determines the actual May 1 cold water pool volume, it presents a draft TMP to stakeholders the first week of May, with the final TMP being submitted to NMFS and SWRCB on or before May 20. During the temperature management "season" (i.e., the time of year when temperature is managed under the TMP), the 2019 NMFS BiOp calls for Reclamation to convene the Sacramento River Temperature Task Group at least monthly during the season and to provide real time reports on temperature performance. (*See generally* Doc. 363 at 25–26 (citing Doc. 85-12 at 4-15, 4-32 to 4-33 & Shasta Cold Water Pool Management Guidance Document cited therein).) NMFS provides technical assistance, review, and comment on the draft and final temperature management plans through the Sacramento River Temperature Task Group. (2019 NMFS BiOp pp. 256–57; Doc. 85-12 at 4-35.)

The 2019 NMFS BiOp plans for certain other measures designed with an intent to benefit winter-run. Among other things, the Proposed Action notes a Resolution adopted by the Sacramento River Settlement Contractors (SRS Contractors)[21], pursuant to which, during drier water years (Tier 3 and Tier 4), the SRS Contractors will meet and confer with Reclamation, NMFS, and other agencies as appropriate to determine if there is any role for the SRS Contractors in connection with Reclamation's operational decision-making for Shasta Reservoir annual operations. (Doc. 85-12 at 4-89.) While a pre-determined reduction (25%) in deliveries to the SRS Contractors is automatically triggered in certain dry years under their "settlement" contracts, other actions may be considered, including: (1) modifying the scheduling of spring diversions by the SRS Contractors; (2) voluntary, compensated water transfers by the SRS Contractors subject to Reclamation approval; and (3) delayed SRS Contractor diversion for rice straw decomposition during the fall months. (*Id*.) The Proposed Action also includes non-flow measures such as

[21] The SRS Contractors are "individuals and entities . . . that individually hold settlement agreements (the SRS Contracts) with [ ] Reclamation." (2019 NMFS BiOp at p. 8.) The SRS Contractors hold "senior" rights that pre-date the CVP and SWP, and thus Reclamation's "without action" scenarios assume these senior rights holders would continue to divert water under their pre-CVP/SWP rights, because that is what they previously did in absence of the operation of the CVP and SWP. (Doc. 85-12 at 3-17.)

spawning and rearing habitat restoration, construction of lower intakes in critical areas, and other fish passage projects. (*Id*. at 4-40 to 4-42.) Despite these, NMFS conceded in its 2019 BiOp that:

> The proposed action will result in ongoing adverse effects to Sacramento River winter-run Chinook salmon. The most significant adverse effects . . . are temperature dependent egg mortality that will occur in all of the Summer Cold Water Pool Management tier types, but most significantly in tier 3 and 4 years.

(2019 NMFS BiOp at p. 753.) The plaintiffs in these lawsuits vigorously challenge on many fronts the sufficiency of the 2019 NMFS BiOp's tiered management approach.

I. Issuance of State ITP and Negotiation of the 2022 IOP

On March 31, 2020, after the filing of these related lawsuits, the State of California issued its Incidental Take Permit (State ITP) covering the operations of the SWP and addressing the impacts of the SWP on species listed under CESA. (Doc. 314-1.) Among other things, the State ITP required that the SWP's operations abide by protective measures *in addition to those set forth in the 2019 biological opinions*. (*See generally id*.) This created a potential for conflict (or "mis-alignment") between SWP and CVP operations. (11/23/21 Leahigh Decl., *CNRA* Doc. 222, ¶ 49.) Such mis-alignment can, in turn, cause various problems, including inefficiencies and management complications. (*See id*., ¶ 52.)

Beginning in early 2021, the parties agreed to several limited stays to allow for review of these cases by the then-new Biden Administration. (*See* Docs. 278 at 8–9.) In the summer of 2021, state and federal water and fisheries agencies began discussing ways to reconcile the operations of the CVP and SWP given the conflicts between the 2019 BiOps and the State ITP. On August 20, 2021, this Court issued an order staying the litigation through September 30, 2021. (Doc. 285.)

On September 30, 2021, Federal Defendants formally reinitiated consultation on the challenged biological opinions. (11/23/21 Conant Decl., Doc. 314-2, ¶ 9.) As mentioned, the remand is ongoing with a current estimate of completion by the end of 2024. (Doc. 482-4.)

Concerned about how the projects were to be operated while the re-initiated consultation was ongoing, the court encouraged the parties to engage in the "serious task of determining how the projects will be operated during any interim period if ESA-consultation is re-initiated." (Doc.

285 at 4.) Those efforts resulted in the filing of a motion to approve the 2022 IOP, which was the subject of extensive briefing and a day-long evidentiary hearing (*see* Doc. 377), followed by issuance of the IOP Order on March 11, 2022. (Doc. 394.)

The following year, given that the remand was still in progress, the Federal Defendants and State Plaintiffs again negotiated an IOP, which was again presented to the Court for approval. After extensive briefing, including numerous objections and proposals for alternative relief, and an evidentiary hearing, the 2023 IOP was approved. (*See* 2023 IOP Order.)

J. Overview of Pending Motions

The disputed issues related to interim relief for 2024 are even narrower in scope than those addressed in the 2023 IOP Order. This is in part because, as discussed below, many of the disputed provisions have already expired or are highly unlikely to be triggered in the remainder of the Water Year.

The 2024 IOP itself proposes certain changes, many of which are ministerial and do not warrant detailed discussion. (*See* Doc. 482 at 6.) The substantive changes include the following:

- Reclamation has agreed to adopt and apply to the CVP several provisions of the ITP pertaining to the protection of Longfin smelt, including ITP Conditions of Approval 8.3.3, 8.4.1, and 8.4.2. (2024 IOP, ¶ 6.i-iv.) These provisions are described in greater detail below as appropriate.
- Reclamation has also agreed to reduce exports consistent with ITP Condition of Approval 8.17 as follows: In the event that WY 2024 is classified based on the San Joaquin Valley 60-20-20 index as Critical, Dry, or Below Normal, Reclamation will "ensure a volumetric reduction consistent with DWR's implementation" of Condition 8.17. (2024 IOP, ¶ 12.) In the event WY 2024 is classified as Above Normal, Reclamation will reduce exports by 100,000 AF to contribute to Spring outflow, except that the reductions will be suspended during high flow conditions as described in ITP Condition 8.17. (*Id.*)
- The moving parties have further agreed to modify the so-called "turbidity bridge avoidance" action, which was included in the 2019 FWS BiOp and ITP Condition of

Approval 8.5.1, to address an "inconsistency" in the way DWR and Reclamation "off ramped" from that action. (2024 IOP, ¶ 8.) Put another way, Reclamation has agreed to time the duration of the turbidity bridge avoidance action in a way that is consistent with DWR's timing. (*See id*.)

The proponents of the 2024 IOP seek judicial approval of their proposal, inclusive of the above changes.

PCFFA objects to the 2024 IOP unless it is modified in various ways that are discussed in detail below. In general, PCFFA requests provisions that: (a) again impose slightly lower temperature targets for winter-run during the temperature management season in dryer years; (b) also impose temperature targets for all other year types; (c) require that Reclamation manage operations to meet higher carryover storage goals in certain year types; (c) close the so-called "stored water loophole"; (d) prohibit Reclamation from seeking exemptions from California Water Quality Standards unless Reclamation first suspends non-essential deliveries to CVP contractors to the extent of Reclamation's discretionary authority, and (e) extend the 2024 IOP's protections for Longfin smelt through March 31. (*See* Doc. 492 at 16–17.)

Defendant Intervenors raise some general objections but focus on the 2024 IOP's proposed measures to protect Longfin smelt, the inclusion of which Defendant Intervenors maintain are unlawful and unreasonable given that Longfin smelt have yet to be listed under the ESA. (*See generally* Doc. 495.)

Though the timeline of the Court's review has been limited by the need to rule on these matters as quickly as possible, the Court has thoroughly considered all of these arguments and supporting documentation.

III. STANDARDS OF DECISION

A. Applicable Standards of Decision Articulated in Prior Orders

The Court has previously engaged in a thorough examination of the competing standards and articulated several key holdings relevant here.

First, the Court concluded that jurisprudence related to approval of consent decrees represents "the best—and possibly the only practical way—to approach the interim injunctive

relief proposals in this case." (*Id*. at 71.) This is because "the IOP [is] a stipulation among the parties to the *CNRA* case regarding the form of injunctive relief those parties believe should be imposed . . ." (*Id*.)

> Where a stipulation results in the termination of claims, it is often termed a "consent decree." *See Gates v. Shinn*, 98 F.3d 463, 468 (9th Cir. 1996). Courts draw upon relatively well-developed standards when determining whether it is appropriate to adopt a consent decree. Approval of a proposed consent decree lies within the discretion of a district court. *See United States v. Oregon*, 913 F.2d 576, 580 (9th Cir. 1990). A district court may approve a consent decree when the decree is "fair, reasonable and equitable and does not violate the law or public policy." *Turtle Island Restoration Network v. U.S. Dep't of Com*., 672 F.3d 1160, 1165 (9th Cir. 2012). If the consent decree "comes within the general scope of the case made by the pleadings, furthers the objectives upon which the law is based, and does not violate the statute upon which the complaint was based, the agreement should be entered by the court." *Hawaii's Thousand Friends, Life of Land, Inc. v. Honolulu*, 149 F.R.D. 614, 616 (D. Haw. 1993) (quoting *Sierra Club, Inc. v. Elec. Controls Design Inc*., 909 F.2d 1350, 1355 (9th Cir. 1990)). Additionally, the court must "be satisfied that the decree represents a reasonable factual and legal determination.'" Oregon, 913 F.2d at 581 (internal quotation omitted). A court's discretion should be exercised in favor of the strong policy favoring voluntary settlement of litigation because settlements "conserve judicial time and limit expensive litigation," *Ahern v. Cent. Pac. Freight Lines*, 846 F.2d 47, 48 (9th Cir. 1988), but a court must nonetheless independently scrutinize its terms and avoid "rubber stamp approval," *United States v. Montrose Chem. Corp. of Cal*., 50 F.3d 741, 747 (9th Cir. 1995); *see also Local No. 93, Int'l Ass'n of Firefighters v. City of Cleveland*, 478 U.S. 501, 525 ("[A] federal court is more than a recorder of contracts from whom parties can purchase injunctions; it is an organ of government constituted to make judicial decisions.").
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> The Ninth Circuit recognized *in Federal Trade Commission v. Enforma Natural Products, Inc*., that standards applicable to the review of consent decrees are relevant to stipulated injunctions as well, because a stipulated injunction is effectively a "temporary settlement" of a lawsuit. 362 F.3d 1204, 1218 (9th Cir. 2004).

(2022 IOP Order at 71–73; *see also id*. at 74 (noting that "by applying at least some principles from consent decree review to the stipulated injunction in that case, the Ninth Circuit's ruling in *Enforma* gives strong support for the proposition that it is appropriate to draw from consent decree jurisprudence to evaluate stipulated injunctions").)

Second, and relatedly, the Court rejected PCFFA's contention that the IOP must "avoid

jeopardy" to be adopted. (*Id*. at 67–69.) Though the ESA imposes upon the CVP and SWP operators a *substantive* obligation to ensure that agency action is not likely to jeopardize the continued existence of any ESA-listed species or result in the destruction or adverse modification of a listed species' designated critical habitat, *see* 16 U.S.C. § 1536(a)(2), in this Circuit, "[i]t is *not* an abuse of discretion for a court to issue an injunction that *does not completely prevent the irreparable harm that it identifies*." *See Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv*., 886 F.3d 803, 823 (9th Cir. 2018) (*NWF III*) (emphasis added). The Court concluded that this rule applies with equal force in the context of the approval of a consent decree:

> [I]n *Turtle Island*, intervenors argued that the injunctive relief contained within the proposed consent decree was unreasonable because Federal Defendants did not comply with the ESA's best available science requirement, 16 U.S.C. § 1536(a)(2), before entering into the agreement. *Turtle Island*, 834 F. Supp. at 1015–16. But, as the district court in that case observed, "[p]rovided that the proposed consent decree is fair, reasonable, and equitable, and does not violate the law or public policy, it need not utilize the best scientific evidence. Such a requirement would transform evaluation of a proposed consent decree into a decision on the merits in contravention of controlling authority." *Id.* at 1019 (citing *Oregon*, 913 F.2d at 582) . . .
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> In sum, while jeopardy is certainly relevant, the court is not convinced that every injunction imposed in an ESA [case] must demonstrably "avoid jeopardy." Or, conversely, that a court cannot adopt an injunction unless it demonstrably "avoids jeopardy." While a court "must act within the bounds of the [applicable] statute[s] and without intruding upon the administrative province," it "may adjust its relief to the exigencies of the case in accordance with the equitable principles governing judicial action." *NWF III*, 886 F.3d at 823.

(2022 IOP Order at 69.)

Third, at a bare minimum,[22] the "traditional" standard for the imposition of preliminary

[22] A preliminary injunction "can take two forms," either a "prohibitory injunction" or a "mandatory injunction." *Marlyn Nutraceuticals, Inc. v. Mucos Pharma GmbH & Co*., 571 F.3d 873, 878–79 (9th Cir. 2009). A "Prohibitory injunction" simply "preserve[s] the *status quo* pending a determination of the action on the merits," while a "mandatory injunction" "orders a responsible party to take action." *Id.* (quotation omitted). In the context of injunctive relief, "[t]he *status quo* means the last, uncontested status which preceded the pending controversy." *Garcia v. Google, Inc*., 786 F.3d 733, 740 n.4 (9th Cir. 2015) (internal quotation omitted). Mandatory injunctions are "particularly disfavored," and a plaintiff's burden is "doubly demanding" when seeking one. *Id.* "In general, mandatory injunctions are not granted unless extreme or very serious damage will result and are not issued in doubtful cases." *Marlyn Nutraceuticals*, 571 F.3d at 879 (internal quotation marks and citation omitted). Consequently, in seeking a mandatory injunction plaintiffs must "establish that the law and facts *clearly favor*" their position. *Garcia*, 786 F.3d at 740 (emphasis in original). As the Court previously explained, other courts have found that the mandatory injunction standard applies under somewhat similar circumstances. (*See* IOP Order at 62–63 (collecting cases).) The Court again finds it unnecessary to determine whether the mandatory injunction standard

injunctive relief applies to any competing requests for relief not included within the stipulated IOP's terms. The 2022 IOP Order articulated the familiar standards in detail:

> The "traditional" standard for the imposition of preliminary injunctive relief "requires a party to demonstrate 'that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest.'" *Stormans, Inc. v. Selecky*, 586 F.3d 1109, 1127 (9th Cir. 2009) (quoting *Winter v. Nat. Res. Def. Council, Inc*., 555 U.S. 7, 20 (2008)); *see also Ctr. for Food Safety v. Vilsack*, 636 F.3d 1166, 1172 (9th Cir. 2011) ("After *Winter*, 'plaintiffs must establish that irreparable harm is likely, not just possible, in order to obtain a preliminary injunction."); *Am. Trucking Ass'n, Inc. v. City of Los Angeles*, 559 F.3d 1046, 1052 (9th Cir. 2009). The Ninth Circuit has also held that an "injunction is appropriate when a plaintiff demonstrates . . . that serious questions going to the merits were raised and the balance of hardships tips sharply in the plaintiff's favor." *All. for Wild Rockies v. Cottrell*, 632 F.3d 1127, 1134–35 (9th Cir. 2011) (internal quotation and citation omitted).[23] For the purposes of injunctive relief, "serious questions" refers to questions which cannot be resolved one way or the other at the hearing on the injunction and as to which the court perceives a need to preserve the *status quo* lest one side prevent resolution of the questions or execution of any judgment by altering the *status quo*. Serious questions are substantial, difficult and doubtful, as to make them a fair ground for litigation and thus for more deliberative investigation.
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> *Republic of the Philippines v. Marcos*, 862 F.2d 1355, 1362 (9th Cir. 1988) (quotations marks and citation omitted).
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> The party seeking an injunction bears the burden of proving these elements. *Klein v. City of San Clemente*, 584 F.3d 1196, 1201 (9th Cir. 2009); *see also Caribbean Marine Servs. Co. v. Baldrige*, 844 F.2d 668, 674 (9th Cir. 1988) (citation omitted) ("A plaintiff must do more than merely allege imminent harm sufficient to establish standing; a plaintiff must demonstrate immediate threatened injury as a prerequisite to preliminary injunctive relief."). Finally, an injunction is "an extraordinary remedy that may only be awarded upon a clear showing that the plaintiff is entitled to such relief." *Winter*, 555 U.S. at 22.
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> That said, "[e]nvironmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or

applies here because PCFFA has failed to meet its burden under the more relaxed, traditional standard.

[23] The Ninth Circuit has found that this "serious question" version of the circuit's sliding scale approach survives "when applied as part of the four-element *Winter* test." *All. for the Wild Rockies*, 632 F.3d at 1134. "That is, 'serious questions going to the merits' and a balance of hardships that tips sharply towards the plaintiff can support issuance of a preliminary injunction, so long as the plaintiff also shows that there is a likelihood of irreparable injury and that the injunction is in the public interest." *Id.* at 1135.

> at least of long duration, *i.e.*, irreparable." *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987). In the context of the ESA, "Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities . . .." *TVA v. Hill*, 437 U.S. at 194. To show irreparable harm in the context of the ESA, plaintiffs do not need to demonstrate an "extinction level" threat. *See* [*NWF III*], 886 F.3d [at] 818–19 [ ]("*NWF III"*) (indicating without specifying that some "lesser magnitude" of harm will suffice); *see also Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv*., 524 F.3d 917, 930 (9th Cir. 2008) ("*NWF II*") (finding that an agency "may not take action that deepens [pre-existing/baseline] jeopardy by causing additional harm"). Thus, for example, impeding a listed species' progress toward recovery may suffice to satisfy the irreparable harm requirement. *Wishtoyo Found. v. United Water Conservation Dist*., No. CV 16-3869-DOC (PLAx), 2018 WL 6265099, at *65 (C.D. Cal. Sept. 23, 2018), *aff'd*, 795 F. App'x 541 (9th Cir. 2020); *see also PCFFA v. Gutierrez,* 606 F. Supp. 2d [1195,] 1207–10, 1249 [(E.D. Cal. 2008)].
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> Any injunction must be narrowly tailored to avoid the irreparable harm identified. *NWF III*, 886 F.3d at 823. "There must be a sufficient causal connection between the alleged irreparable harm and the activity to be enjoined, but a plaintiff need not further show that the action sought to be enjoined is the exclusive cause of the injury." *Id.* (internal quotation and citation omitted). Moreover, "[i]t is not an abuse of discretion for a court to issue an injunction that does not completely prevent the irreparable harm that it identifies." *Id.* Finally, a court may decline to impose injunctive relief that is infeasible. *See NWF v. NMFS*, No. CV 01-640-RE, 2005 WL 3576843, at *7 (D. Or. Dec. 29, 2005) (declining to order requested ESA relief where the proposed measures were not feasible).

(2022 IOP Order at 61–64.)

B. Renewed Arguments Regarding Standards of Decision

The Federal Defendants and State Plaintiffs once again assert that the Court's prior rulings regarding the applicable standards of decision are "law of the case" and therefore that the Court should not revisit its rulings on those issues. (*See* Doc. 482 at 10; *see also* Doc. 406 at 9.) The Court has addressed this argument previously as follows:

> Though [the Moving Parties'] general description of the law of the case doctrine is correct, the doctrine is more nuanced than Federal Defendants acknowledge. "The law of the case doctrine does not . . . bar a court from reconsidering its own orders before judgment is entered or the court is otherwise divested of jurisdiction over the order." *See Askins v. U.S. Dept. of Homeland Sec.*, 899 F.3d 1035, 1042 (9th Cir. 2018); *see also Dreith v. Nu Image, Inc*., 648 F.3d 779, 787–88 (9th Cir. 2011) ("[A] district court has the inherent power to revisit its non-final orders, and that power is not lost when the case

> is assigned mid-stream to a second judge."). "That leaves the district court free to correct any errors or misunderstandings without having to find that its prior decision was 'clearly erroneous.'" *Askins*, 899 F.3d at 1043. Nonetheless, just because the Court may reconsider the conclusions of the 2022 IOP Order does not mean that it will be moved to do so. *See id*. at 1043 ("The district court may decide the second motion . . . in the same way it decided the first.").

(2023 IOP Order at 26–27.) The parties' recent arguments do not move the needle on this subject.

IV. EVIDENTIARY MATTERS

At least one party has requested that the Court take judicial notice of documents in the public record. Those requests are GRANTED as to any such documents that have been cited herein. (Doc. 507.) To the extent those documents have not been cited, the requests for judicial notice are **DENIED AS MOOT**.

V. ANALYSIS OF THE 2024 IOP[24]

As in prior orders, the Court structures its review of the 2024 IOP around the general rule that a district court may enter a proposed consent judgment, or in this case approve a stipulated injunction, "if the court decides that it is fair, reasonable, and equitable and does not violate the law or public policy." *Sierra Club*, 909 F.2d at 1355.

A. Fairness

"Fairness should be evaluated from the standpoint of signatories and nonparties to the decree." *Turtle* Island, 834 F. Supp. 2d at 1016 (internal citations and quotations omitted). "In determining whether a proposed consent decree is fair, courts examine both procedural and substantive fairness." *Id.*; *see also United States v. Pac. Gas & Elec.*, 776 F. Supp. 2d 1007, 1024 (N.D. Cal. 2011) (*PG&E*).

1. Procedural Fairness

The 2022 IOP Order explained how procedural fairness is to be evaluated:

> To evaluate procedural fairness, the court must determine whether the negotiation process was "fair and full of adversarial vigor." *United States v. Chevron*, 380 F. Supp. 2d 1104, 1110–11 (N.D. Cal. 2005). If the decree is the product of "good faith, arms-length

[24] Once again, the Court has not found it practical to include a separate "findings of fact" section in this order; rather, it has included relevant discussion of the factual record within its analysis. To the extent that any finding in the analysis section could be interpreted as a finding of fact rather than a conclusion of law, that is the Court's intent, as is the reverse.

> negotiations," it is "presumptively valid." *Id.* (quoting *Oregon*, 913 F.2d at 581). At the same time, "the district court must ensure that the agreement is not . . . a product of collusion . . ." *PG&E*, 776 F. Supp. 2d 1025.

(2022 IOP Order at 80.) Applying these standards, the 2022 IOP Order found that the 2022 IOP was produced from intensive negotiations that lasted more than two months, with meetings that occurred sometimes multiple times per week. (*Id*. at 81.) The Court rejected Defendant Intervenors' argument that negotiations between the Federal Defendants and State Plaintiffs were "politically-motivated" and therefore were not undertaken in good faith. (*Id*.) Instead, the 2022 IOP Order found that because Federal Defendants have maintained throughout these proceedings that they have not violated the law, whereas State Plaintiffs consistently maintained the contrary position, the IOP negotiations were not tainted by collusion. (*Id*.) Moreover, the Court found that there was no requirement that the negotiations be inclusive because "[t]he Government need not allow third parties to participate in settlement negotiations." (*Id*. at 83, citing *Turtle Island*, 834 F. Supp. 2d at 1020–21; *see also id*. ("So long as a party is given the opportunity to 'air its objections and the district court has determined that the settlement is fair and reasonable, a party's lack of consent will not block the entry of the consent decree/temporary settlement.").)

In relation to the 2023 IOP, the Court found no reason to change the fairness analysis because no objecting party presented any new information. (2023 IOP Order at 30–31.) There was no suggestion that the postures of the Federal Defendants and State Plaintiffs have changed; they remained adversarial. (*Id*.) Negotiations were thorough and frequent. (*Id*.)

Once again, the present record supports the same conclusion. (*See* Doc. 482 at 10–11 (indicating that Federal Defendants and State Plaintiffs met regularly to negotiate the renewed IOP, met with representatives of the other parties to these related cases, provided them with a draft IOP, and solicited their feedback).) The 2024 IOP is procedurally fair.

2. Substantive Fairness

In evaluating substantive fairness, it is "important for the district court to be fully informed regarding the costs and benefits of the decree." *Chevron*, 380 F. Supp. 2d at 1113 (citing *Montrose Chem. Corp*., 50 F.3d at 746). However, "[i]t is not the duty of the court to

determine whether 'the settlement is one which the court itself might have fashioned, or considers ideal.'" *Chevron*, 380 F. Supp. 2d at 1111 (quoting *United States v. Cannons Eng'g Corp*., 899 F.2d 79, 84 (1st Cir. 1990).). Rather, substantive fairness "mirrors the requirement that the decree be equitable." *United States v. Telluride*, 849 F. Supp. 1400, 1402 (D. Co. 1994). Put another way, the substantive fairness inquiry "concerns the issues of corrective justice and accountability." *Arizona ex rel. Woods v. Nucor Corp*., 825 F. Supp. 1452, 1458 (D. Ariz. 1992), *aff'd sub nom*. *Arizona v. Components Inc.*, 66 F.3d 213 (9th Cir. 1995). "[T]he court's approval is nothing more than an amalgam of delicate balancing, gross approximations and rough justice." *Oregon*, 913 F.2d at 581 (internal quotations omitted). The court "need only be satisfied that the decree represents a 'reasonable factual and legal determination.'" *Id.*

The 2022 IOP relied upon *Hawaii's Thousand Friends*, 149 F.R.D. at 616, to provide a general, practical approach to its analysis of the 2022 IOP, which Judge Drozd concisely described as "a complex package of measures that is layered on top of one of the most complex regulatory schemes in all of environmental law." (2022 IOP Order at 84.) In *Hawaii's Thousand Friends*, the district court found that a consent decree (or here a stipulated injunction) should be approved if it "comes within the general scope of the case made by the pleadings, furthers the objectives upon which the law is based, and does not violate the statute upon which the complaint was based." 149 F.R.D. at 616. Following this rubric, the 2022 IOP Order found "[i]n a broad sense," that "the IOP addresses real disputes between Federal Defendants and State Plaintiffs in meaningful and reasonably practical ways," (2022 IOP Order at 84), that the central components of the IOP came "within the general scope of the case made by the pleadings," and that the 2022 IOP meaningfully and reasonably addressed each of those issues, keeping in mind the central role of the Court, which is to determine whether the IOP "furthers the objectives upon which the law is based." *Id.* The Court relied on this general standard to evaluate the 2023 IOP. (*See generally* 2023 IOP Order.)

In support of Court approval of the longfin smelt provisions included in the 2024 IOP, State Plaintiffs appear to suggest that the Court "should" approve a consent decree if it (1) comes within the general scope of the claims advanced in the pleadings; (2) furthers the

objectives of (and therefore does not violate) laws underpinning those claims, even if the consent decree may violate another statute or public policy. (*See CNRA* Doc. 348 at 3–5 (suggesting that the Court should disregard Defendant Intervenors' arguments that the 2024 IOP violates the Central Valley Project Improvement act (CVPIA) and the Agreement Between the United States of America and the Department of Water Resources of the State of California for Coordinated Operation of the Central Valley Project and the State Water Project (COA)).) To the extent State Plaintiffs truly intended for their argument to go this far, the Court finds it unpersuasive. Though it is true the *CNRA* FAC does not contain any claim premised upon the CVPIA or COA, the Court's review of a consent decree is not as limited as State Plaintiffs suggest. The Court cannot disregard the general standard articulated by the Ninth Circuit, which permits approval of a consent decree when the decree is "fair, reasonable and equitable and does not violate the law or public policy." *Turtle Island*, 672 F.3d at 1165. That some cases appear to conflate the requirement for evaluating whether a consent decree violates law or public policy with the requirement that the decree's terms fall within the general scope of the statutes underpinning the claims in the case, *see Sierra Club*, 909 F.2d at 1355, does not mean those tests always and entirely overlap. It would seem to go without saying that a party cannot use a court-approved consent decree to evade otherwise enforceable legal constraints. *See Keith v. Volpe*, 118 F.3d 1386, 1393 (9th Cir.1997) ("[P]arties to the Consent Decree . . . [can]not agree to terms which would exceed their authority and supplant [other] law[s].")*; St. Charles Tower, Inc. v. Kurtz*, 643 F.3d 264, 270 (8th Cir. 2011) ("While parties can settle their litigation with consent decrees, they . . . cannot consent to do something together that they lack the power to do individually."); *Kasper v. Bd. of Election Comm'rs of the City of Chicago*, 814 F.2d 332, 341–42 (7th Cir. 1987) ("Because a consent decree's force comes from agreement rather than positive law, the decree depends on the parties' authority to give assent. . . . A consent decree is not a method by which [ ] agencies may liberate themselves from the statutes enacted by the legislature that created them.").

a. *General Issues Relevant to Substantive Fairness*

The proponents of the 2024 IOP again to offer several general justifications for a finding that the IOP is substantively fair.

i. The IOP Corrects Mis-Alignment of the CVP and SWP

Federal Defendants and State Plaintiffs continue to maintain that the 2024 IOP corrects mis-alignments between the CVP and the SWP caused by the State ITP. (Doc. 482 at 14–15; 12/22/23 Allen Decl., Doc. 482-5, ¶¶ 11–12; 12/22/23 White Decl., Doc. 482-3, ¶ 15; 2/21/24 White Decl., Doc. 500-2, ¶ 14.) As the 2022 IOP Order explained: "While the State's ITP on its face only constrains the operations of state agencies (i.e. the California Department of Water Resources), the state and federal projects are operated in concert with one another. Federal Defendants and State Plaintiffs persuasively assert that a disconnect of this nature can cause inefficiencies in the use and management of water resources." (2022 IOP Order at 18; *see also* 11/23/21 Leahigh Decl., ¶ 52 ("From a project operator perspective, misalignment between CVP and SWP operations creates significant challenges for management of the two projects. There is no clear guidance on how the differing export constraints would fit within the current [Coordinated Operating Agreement] framework between the two Projects."); 11/23/21 Conant Decl., ¶¶ 7–8 (echoing that "[A]lignment in years where there is not enough water to meet all project needs, such as occurred in water year 2021, improves the efficient use of scarce water supplies. Reclamation has concerns that implementing inconsistent CVP and SWP operations would be inefficient and could result in both projects' being unable to maximize available water, especially in dry hydrology.").)

In the present briefing, Defendant Intervenors offer evidence of situations where the CVP and SWP were able to coordinate on specific matters prior to the IOP. Specifically, Ronald Milligan opines that there have been two instances since 2020 when the SWP and CVP has been governed by different operational criteria due to the more restrictive flow measures contained in the State ITP for the benefit of Longfin smelt that did not (at least at those times) apply to the CVP. (1/31/24 Milligan Decl., Doc. 487, ¶ 9.) According to Mr. Milligan, "[t]he difference in restrictions on OMR flow applicable to each project did not cause a problem for operations. In both instances CVP and SWP operators coordinated pumping and tracked exports through the 'exports sharing account' to comply with the export sharing requirement in COA." (*Id.*, ¶ 10.) However, in reply, Federal Defendant's expert, Kristin White, explained that "[there remains a

need to provide operational certainty and maintain efficient operations of a coordinated system." (2/21/24 White Decl., ¶ 17.) This is because, for example, "when the projects are operating to separate standards, Reclamation's access to use the Intertie—which allows water to be moved from one canal to the other (i.e. the Delta Mendota Canal to the California Aqueduct or vice versa)—is limited. This potentially limits Reclamation's flexibility in performing maintenance and could limit other areas of flexibility, as well." (*Id*.)

Overall, the Court finds that the "misalignment" rationale continues to provide general support for extending the IOP. Nonetheless, in part because of its obligation to ensure interim relief is "narrowly tailored," the Court has not relied upon it as the sole justification for the finding of reasonableness as to any particular provision of the IOP or as to the IOP as a whole.

ii. The IOP Prevents Unnecessary Litigation

The various iterations of the IOP also reflect a temporary settlement of a highly complex lawsuit. Though the approval of the IOP continues to be time consuming, this process has nonetheless saved judicial and party resources, including resources needed to complete the ongoing remand. (*See* 12/22/23 Marcinkevage Decl., ¶ 16 (indicating that further litigation would harm the ability of agency staff to complete the remand process).) The Court continues to find this consideration highly relevant.

b. *Shasta Operations & Related Issues*

i. 2024 IOP's Shasta Operations Provisions

The 2024 IOP retains the essential elements of the 2022 and 2023 IOPs related to Shasta Reservoir/Dam operations. If WY 2024 is classified as a Critical, Dry, or Below Normal, the 2023 IOP imposes certain procedures and actions that must be taken to provide cold water conditions for winter run Chinook Salmon egg incubation. (*See* 2024 IOP, ¶¶ 13–17.) In addition, the 2024 IOP calls upon Reclamation to set carryover storage volume goals according to water year type. More specifically, under the 2024 IOP:

- Reclamation is again generally committing to meet daily average water temperatures at the Clear Creek gauge on the Sacramento River of 55°F (in critical years) and 54°F (for dry and below normal years) from May 1–October 31. (*Id*. ¶ 16.)

- Reclamation will use the following "potential" end-of-September Shasta carryover storage "goals" to "inform the development of a final [carryover storage] target": 1.2–1.8 MAF in a Critical year; 1.8–2.5 MAF in a Dry year; 2.5–3.2 MAF in a Below Normal year. (*Id*. ¶ 17.)
- If Reclamation is unable to meet the temperature-related habitat criteria described above for "Critical, Dry, or Below Normal years," then the Shasta Planning Group, will "agree on temperature management that provides sufficient habitat for the longest period possible." (*Id*., ¶ 13.i.b.)
- In Critical or Dry years only, Reclamation will operate Shasta Reservoir to meet the following priorities in the following order (*id*., ¶ 13.):

  (a) Public health and safety, defined as meeting municipal and industrial Delta salinity requirements and minimum deliveries for public health and safety;

  (b) Meeting the habitat needs of winter-run chinook salmon by, among other things, not scheduling or make deliveries of "stored water" for any reason other than for "public health and safety" until Reclamation approves a temperature management plan that will meet the winter-run habitat criteria (in the form of the temperature targets identified above) and End-of-September storage goals.

  (c) "Deliveries of stored water to senior water contractors and Central Valley Project Improvement Act (CVPIA) level 2 refuge supplies after ensuring any such deliveries are consistent with the above priorities."

  (d) Other deliveries after ensuring any such deliveries are consistent with the above priorities.

ii. Prior Finding of Reasonableness.

Because some of the discussion that follows builds upon the Court's prior findings that the 2022 and 2023 IOP's Shasta Operations provisions were reasonable, the Court reiterates the essential aspects of that reasoning from the 2020 IOP Order here:

> First and foremost, the IOP aims to provide much-needed protection for winter-run eggs in the Upper Sacramento River in the coming water year. . . . Winter-run experienced high levels of temperature-

related egg mortality in 2020 and 2021. Current water storage conditions and ongoing drought risk a third year of significant temperature related egg mortality. This presents a serious concern for the species as a whole in terms of its ability to persist and to recover because of: (a) its three-year life cycle and (b) the fact that it is geographically vulnerable since the only population spawns in the reaches below Shasta Dam. This situation warrants the taking of measures to protect all freshwater life stages of winter run to minimize that risk. As a threshold matter, this issue falls well within the scope of the claims State Plaintiffs have brought against Federal Defendants in this case. The operative complaint in CNRA specifically alleges that the Proposed Action as approved by the 2019 NMFS BiOp degrades conditions for listed species impacted by Shasta Dam operations and fails to require appropriate cold water pool operations, including by eliminating carryover storage requirements. (*See CNRA* FAC, ¶¶ 80–81, 93, 104.)

Substantively, the IOP takes balanced and reasonable steps toward addressing the risks identified above in several interrelated ways. First, the IOP sets forth temperature targets for winter run incubating eggs that are (if they can be maintained) more protective and more biologically justifiable than those that would govern under the dry year (Tier 3 and Tier 4) scenarios of the 2019 NMFS BiOp. Even assuming there is a scientific foundation for the idea that winter-run incubating eggs can withstand temperatures at or above 56°F (with 56°F being allowed in Tier 3 years and no upper limit applied in Tier 4 years under the 2019 NMFS BiOp) for certain periods of time, nothing in the law requires managers to operate right up to that line, which would leave the fish and project operators no room for error. *Cf. San Luis. v. Jewell*, 747 F.3d at 624 (finding it was error for the district court to require the agency to explain why it picked one protective measure over another one that would have had less impact on water supply; "FWS need only have adopted a final RPA which complied with the jeopardy standard and which could be implemented by the agency").

Second, the IOP tackles the related problem of attempting to balance the need for suitable instream temperatures this year against the need to ensure sufficient water is carried over as storage into WY 2023. It does so by setting reasonable carryover storage goals that must be prioritized vis-à-vis consumptive uses of water (other than for health and safety purposes). As Dr. Herbold cogently explained, the IOP's targeted ranges recognize the reality of the present situation, namely that managers "cannot make water." (Herbold Second Decl., ¶ 56.) The court views the IOP's approach to carryover storage as a reasonable step in the right direction that, while not guaranteeing any particular carryover storage outcome, re-prioritizes carryover storage from a mere "consideration" under the 2019 NMFS BiOp to a more formalized component of the temperature planning process.

Third, the IOP directly addresses the concern shared by all moving parties that authorizing deliveries of stored water from Shasta early in the year may foreclose the most advantageous temperature management options by delaying deliveries of stored water until a temperature management plan is in place. As noted above, the court

finds persuasive the central premise underpinning this requirement: "A principal problem with operations under the [2019 NMFS] BiOp is the incorrect presumption that one can wait to determine how this complex system can be successfully operated to achieve many goals until after some decisions are made that reduce the availability of options to achieve temperature management goals." (Grober Suppl. Decl., ¶ 46.) Put simply, in a situation where very difficult choices need to be made, Reclamation's commitment in the IOP to release no stored water beyond that needed for health and safety purposes until a water management plan is adopted "ensures that the maximum amount of flexibility will be retained to use water wisely." (Herbold Second Decl., ¶ 37.)

Relatedly, the IOP modifies the decision-making guidelines and structure in ways that reinforce the IOP's prioritization of winter run habitat needs. The guidelines come in the form of a prioritization system [applicable in Critical and Dry years] that gives first priority to public health and safety. Second priority is given to the habitat needs of winter-run, which are embodied in (a) the temperature targets discussed above that are designed to prevent catastrophic temperature dependent mortality in dryer years and (b) the carryover targets that acknowledge the demonstrated need to plan ahead for subsequent years. Only once a water management plan is in place that addresses the second priority for the longest period possible can the third and fourth priorities be satisfied: deliveries to senior water contractors and to "Level 2" wildlife refuges; and other deliveries. The IOP also modifies the decision-making structure to ensure appropriate weight is given to the second priority by giving the assigned wildlife agency (NMFS) final say in the temperature management planning process through the six-agency Shasta Planning Group. Defendant Intervenor's witness Lee Bergfeld critiques the Group's role as "duplicative" and because it excluded the SRS Contractors. (Bergfeld Decl., ¶¶ 47–48.) But the record before the court indicates that the Shasta Planning Group structure will coordinate with other parties, including the SRS Contractors, through other means. In fact, Reclamation, a member of the Shasta Planning Group, is actively doing so now.

It is the interrelatedness of all of these elements that undermines many of its detractors' arguments. As all parties appear to acknowledge, no one can predict today exactly how day-to-day operations under the IOP will differ from management that would have taken place under the 2019 NMFS BiOps. Defendant Intervenors use this as an avenue for attacking the IOP, arguing that its proponents have "not shown the IOP's temperature targets will avoid harm." (*CNRA* Doc. No. 233 at 26 (emphasis added).) But requiring in advance a definitive demonstration of how the IOP will function in practice throughout the coming water year would effectively preclude the very thing that makes the most (and perhaps only) sense here, namely, conserving as much water as possible (without endangering human health and safety) until sufficient information is available to generate a temperature management plan. Ultimately, by calling for early season delivery delays, the IOP provides managers flexibility in meeting the habitat needs while also increasing the likelihood that they will succeed in doing so by

delaying deliveries until a temperature management plan is in place.

(2022 IOP Order at 84–87.)

iii. IOP Proponents' General Justifications for a Renewed Finding of Reasonableness

The moving parties provide two primary justifications for a renewed finding that the IOP's Shasta provisions are again fair and reasonable. First, given that the Court analyzed materially indistinguishable versions of these provisions in the 2022 and 2023 IOP Order and found them to be fair and reasonable, the proponents of the IOP argue that the logic of the Court's prior order should still hold. (Doc. 482 at 4; *see also* Doc. 406 at 11 (citing 2022 IOP Order at 83–105).) The Court agrees that its prior orders provide the general backdrop for its reasonable analysis here, taking into consideration current circumstances.

Second, Federal Defendants and State Plaintiffs argue that the IOP "functioned well, both operationally and biologically, and has met their intended function by establishing a prioritization structure for operational and species needs, establishing a manageable process to execute that structure, and ensuring that the prioritization structure was implemented." (*Id*. at 12.) The proponents of the 2024 IOP acknowledge that the 2023 IOP did not directly control Shasta Operations during the temperature management season. (*See* 2/21/24 Marcinkevage Decl., ¶¶ 10–11.) Nonetheless, they maintain that the 2023 IOP provided important governance and decision-making provisions that improved outcomes. (*Id*. at ¶ 10 ("Coordination [under the IOP's Shasta Planning Group] proved essential for reaching agreement on a final temperature management plan that had to be developed with consideration for several competing water quality standards. Without this level of coordination through the Shasta Planning Group, I cannot say with confidence that temperature performance could have improved. Therefore, I conclude that the IOP's governance and decision-making processes and outcomes had a positive impact on winter-run Chinook salmon in 2023.").

iv. 2023 Water Year and Outcomes at Shasta Dam

Water Year 2023 was formally classified as "Wet" for both the Sacramento and San Joaquin Valleys. (12/22/23 White Decl., ¶ 3.) As a result, many of the IOP's Shasta operations

provisions were not triggered and Reclamation was able to manage Shasta releases so that temperatures did not exceed 53.5°F at Clear Creek throughout the entire temperature management season. (*Id*., ¶ 5.) This, in turn, led to very low temperature dependent mortality of winter-run Chinook. (12/22/23 Marcinkevage Decl., ¶ 13 (indicating that preliminary modeling showed only 2% temperature dependent mortality).) Other largely uncontrollable sources of mortality to salmonids remained significant. Notably, the ongoing problem of thiamine deficiency, discussed in the Court's prior orders (*see, e.g.*, Doc. 468 at 48–50), may have impacted the overwhelming majority of young Chinook salmon in the region. (12/22/23 Marcinkevage Decl., ¶ 15.)

Wet conditions in 2023 also allowed California's reservoirs to largely recover from the recent drought. Shasta Reservoir, for example, began the temperature management season in May 2023 with 4.45 MAF in storage and began WY 2024 with 3.3 MAF. (12/22/23 White Decl., ¶¶ 4, 8.)

In declarations submitted in late December 2023, Reclamation officials asserted there was a "high chance" of meeting the 53.5°F temperature targets again in the 2024 temperature management season, absent a significant change in hydrology. (*Id*.) These assertions were reiterated in late February 2024. (2/21/24 White Decl., ¶ 5; 2/21/24 Marcinkevage Decl., ¶ 14 ("[C]urrent hydrology suggests a low likelihood of experiencing a drier water year type, even if the hydrology moves toward drier conditions in the remainder of the precipitation season; as of February 12, 2024, Shasta Reservoir is at 122% of historic average and 83% of total capacity (approximately 3.77 MAF). Given current conditions at Shasta Reservoir, it is highly likely that conditions will support water temperature management of 53.5ºF for much, if not all, of the winter-run Chinook salmon temperature management season; in that case, the IOP's dry-year provisions will not control.").) The Court also takes judicial notice of the March 1, 2024 water supply forecast of the "Sacramento Valley Water Year Type Index 40-30-30" (SVI)—the index used to determine applicability of the Shasta provisions of the IOP. *California Data Exchange Center, California Department of Water Resources, 2024 Water Year Forecast as of March 1, 2024, available at*: https://cdec.water.ca.gov/reportapp/javareports?name=WSI (last visited Mar. 28, 2024); (*see also* 2/10/22 Conant Decl., Doc. 457 (explaining the various water supply indices,

how they are used, and where the latest updates can be found).) According to the March 1, 2024 SVI, there is no more than a 1% chance that the Sacramento Valley Water Year Type Index will be Dry or Critical, though it remains unclear which of the other water year types will prevail, with either a Below Normal or Above Normal determination appearing to be the most likely outcomes. (*Id*.)

By their own terms, many of the 2024 IOP's provisions related to Shasta operations will only be triggered if the water year is classified as Critical, Dry, or Below Normal, with the most controversial provisions only applying in Critical or Dry years. (*See, e.g*., 2024 IOP, ¶ 4, 12–13.) Nonetheless there remains a not insignificant chance that at least the Below Normal provisions of the 2024 IOP applicable to Shasta operations may still apply. (*See See* 2/21/24 Marcinkevage Decl., ¶ 14.) As such, the Court believes there is reason to evaluate at least those Shasta provisions that apply in Below Normal or wetter years.

v. Defendant Intervenors' Related General Objections

a) Changed Hydrology

Defendant Intervenors generally argue that because 2023 was a "hydrological and biological success," the 2024 IOP is "not a reasonable resolution of the interim relief issues in this case." (Doc. 485 at 21).[25] They point to the above-mentioned statistics about WY 2023 and the start of WY 2024 and emphasize that winter run Chinook egg-to-fry survival in 2023 was approximately 25%, a "far cry" from the 2.2% and 2.6% estimates from 2021 and 2022, respectively. (*Id*. (citing 1/31/24 Cavallo Decl., Doc. 489, ¶ 5; 1/1/22 Cavallo Decl., Doc. 333, at 17 Table 2).) In addition, Shasta Lake had 3.332 MAF in storage at the end of September 2023, whereas its 2021 and 2022 end-of-September storage totals were 1.07 and 1.5 MAF, respectively. (*Id*. (citing record).) Defendant Intervenors maintain, therefore, that "the circumstances this Court faced in issuing the prior two orders are simply not present" this year. (*Id*.)

The record does not support Defendant Intervenors' position on this point for several reasons. First, despite the upswing in survival experienced by winter-run Chinook juveniles in

[25] It is somewhat unclear whether the Defendant Intervenors object wholesale to the 2024 IOP or only to the "changes" it makes to the 2023 IOP's provisions. (*See* Doc. 485 at 21.)

2023, "juvenile survival to the Delta [has] fluctuated greatly" in recent years, "and the cohort replacement rate has been negative, indicating that the species condition is not stable and is, in fact, still at risk." (2/21/24 Marcinkevage Decl., Doc. 501-1, ¶ 7.)

Second, though a Critical or Dry year classification appears to be highly unlikely, a Below Normal year remains a possibility. As it has previously indicated, the Court agrees with NMFS Assistant Regional Administrator Cathy Marcinkevage that "[the measures associated with these drier water year classifications provide important protective measures should wetter hydrology not develop through the remainder of the year." (12/22/23 Marcinkevage Decl., ¶ 11.) Moreover, the exact options available to managers during the temperature management season cannot be predicted with confidence at this time, meaning that the *procedures* of the IOP remain important:

> Considering the current storage conditions at Shasta Reservoir, it seems quite likely that Reclamation would manage Shasta Reservoir as a Tier 1 year. In Tier 1 years, Reclamation determines that cold water pool is sufficient (i.e., more than 2.8 MAF of cold water pool in Shasta Reservoir at the beginning of May or modeling suggests that a daily average temperature of 53.5°F at CCR can be maintained from May 15 to October 31) and proposes to operate to a daily average temperature of 53.5°F at the CCR gaging station to minimize TDM. Although Tier 1 years generally have sufficient cold water to maintain 53.5°F through October 31, the unknown meteorology of coming months continues to present a small risk of temperatures rising above 53.5°F, particularly towards the end of the temperature management season in September and October. Though Reclamation is able to generally manage these risks through real time operations of the temperature control device, temporary exceedances may occur and allowable tolerances will be identified in the annual temperature management plan through coordination with SRTTG.

(2/21/24 Marcinkevage Decl., ¶ 16.)

b) Water Supply Impacts

The SRS Contractors again revisit the subject of water supply tradeoffs associated with the IOP. (Doc. 485 at 22–23.) Though arguably these objections focus on the Longfin smelt provisions, the Court reiterates here its previous ruling concerning how such evidence may be considered:

> "Congress removed from the courts their traditional equitable discretion in injunction proceedings of balancing the parties' competing interests." *PCFFA v. Gutierrez*, 606 F. Supp. 2d at 1204; see also *NWF I*, 422 F.3d at 793–94 ("Congress has determined that under the ESA the balance of hardships always tips sharply in favor

> of endangered or threatened species."). In practice, this results in a prohibition of the balancing of economic harms against the Congressionally determined public interest in preserving endangered species. *PCFFA v. Gutierrez*, 606 F. Supp. 2d at 1204. A similar concept has been applied in the context of consent decree approval. *Turtle Island*, 834 F. Supp. 2d at 1018 (noting that if intervenor fishing interests ultimately had access to their fishery limited by the terms of the consent decree "this result would be consistent with the goals of the ESA and in the public's interest," because under Hill, 437 U.S. at 184, "[t]he plain intent of Congress in enacting [the ESA] was to halt and reverse the trend toward species extinction, whatever the cost").
>
> Declarations have [ ] been filed in this case, by the SRS Contractors and others, containing evidence of "pure economic harm" caused by water supply shortages. (*See, e.g*, Doc. 439 (Water Resources Manager of Kern County Water Authority describing, among other things, economic impacts of water supply shortages).) As the Ninth Circuit has noted, ESA restrictions have the potential to harm "millions of acres of land and tens of millions of people," *San Luis & Delta-Mendota Water Auth*., 747 F.3d at 605, who rely on water from the CVP-SWP. As the 2022 IOP Order indicated: "This is well established and understood." (2022 IOP Order at 108 n. 68.) Again, other declarations detail related issues that are not purely economic, such as alleged harm to the food supply and harm to underprivileged communities, schools and businesses that may result from water delivery restrictions. The Court is permitted to consider these the societal harms. *PCFFA v. Gutierrez*, 606 F. Supp. 2d at 1213–14 (suggesting court may consider evidence regarding the health and safety effects of secondary adverse impacts such as land subsidence, land fallowing leading to air quality impacts, and community dislocations arising from job losses). The Court has read and considered all of declarations addressing these subjects. As the 2022 IOP Order indicated, "given the statutory priority given to endangered species, these concerns can only underscore the court's obligation to ensure that the measures it imposes are narrowly tailored to address anticipated harms." (2022 IOP Order at 109.)

(2023 IOP Order at 55–56.) In considering whether the 2023 IOP was narrowly tailored, the Court again takes information regarding water supply costs into consideration as "one reason why the Court finds the IOP's provisions to be more appropriate than the alternatives offered by PCFFA." (*Id*. at 56.)

vi. PCFFA's Objections and Requested Modifications Related to Shasta Operations

As was the case in the briefing leading up to approval of the 2022 and 2023 IOPs, PCFFA again argues that the temperature targets and carryover storage goals in the 2023 IOP are insufficiently protective. (Doc. 492-2, ¶¶ 16–17.) PCFFA also requests that the Court close what

it calls the "stored water loophole" in the 2024 IOP's prioritization system. (*Id*., ¶ 13.i.c.)

Procedurally, PCFFA once again argues that the Court can modify the proposed 2024 IOP in the various ways they suggest, so long as the Court provides appropriate findings of fact and an opportunity to object to the proposed changes. (Doc. 494 at 15 (citing *Enforma*, 362 F.3d at 1218).) Ninth Circuit held in *Enforma* that the district court erred by making two significant changes to a proposed consent decree prior to approving it. *See id*. Rather, "[i]f the district court elects to enter a preliminary injunction that varies from the it should be supported by findings of fact and conclusions of law entered on the record and upon notice to the parties." *Id*. at 1218–19. Even assuming the holding of *Enforma* empowers the Court to make the changes PCFFA suggests, the Court again declines to do so for the reasons set forth below.

a) PCFFA's Renewed Request to Modify IOP's Temperature Provisions

With regard to temperature, PCFFA again pushes for slightly lower temperature targets of 54.5ºF (as opposed to 55ºF) in Critical years; 53.5ºF (as opposed to 54ºF) in Dry and Below Normal years. In addition, PCFFA seeks to expand the IOP's temperature provisions beyond the dryer year types covered by the proposed 2024 IOP to also require 53.5ºF in Above Normal and Wet years. (Doc. 492-2, ¶ 16.)

The Court's evaluation of PCFFA's previous temperature-related remedial requests provides important background. In the 2022 IOP Order, the Court rejected PCFFA's request to impose lower temperature targets:

> PCFFA contends that the IOP's provisions related to Shasta do not go far enough in several respects. First, PCFFA argues that the IOP adopts targets that are biologically unjustifiable. (*See generally* Doc. No. 638.) With regard to the temperature targets to protect winter-run incubating eggs, as the court has already acknowledged, the targets advanced by PCFFA are biologically justified and would help ensure (if met) very low temperature dependent mortality. Even the IOP's advocates acknowledge that some (possibly quite significant) temperature related mortality may occur at the temperature targets adopted in the IOP. (*See* Brown Decl., ¶ 32; Tr. 42.) But, it is well-established that there are tradeoffs in dry years between (a) targeting temperatures to a particular level and (b) the length of time that temperature target can be maintained, as well as preserving water storage to ensure effective temperature management in the following year. (*See* Doc. No. 203 at 28 (June 24, 2020 Order discussing these

> tradeoffs apparent from the record then before the court); 2019 NMFS BiOp at p. 259 (explaining "operational tradeoffs between maintaining high flows for the fall temperature management versus reducing flows to conserve storage for the following year's temperature management").)
>
> Because of these tradeoffs, the IOP takes a middle-of-the road approach, setting targets that are likely to be more protective than those under the 2019 NMFS BiOp, *see* Brown Decl., ¶¶ 32 (explaining that models indicate mortality would be 88-100% if temperatures are held at or above 56°F [under the 2019 NMFS BiOp], whereas mortality may be lower 34–74% under the IOP), but which are somewhat more likely to be achievable than those in the PCFFA PI. Crucially, while it is not yet clear for how long managers can achieve the IOP's temperature targets this year, Reclamation is at least "committing" to meeting the targets in the IOP. (Tr. 144.) This contrasts with the evidence in the record before the court indicating that PCFFA's more stringent proposed temperature requirements are unlikely to be achievable. As Mr. Conant testified, current estimates indicate that end of April storage in Shasta will be somewhere on the order of 2.1 MAF, (Tr. 125), well shy of the 3.5 MAF PCFFA estimates is needed to meet their proposed temperature targets. (Rosenfeld Second Decl., ¶ 37.) The court acknowledges that PCFFA's witness, Dr. Rosenfield, has also pointed out that the temperature targets called for in the IOP have only been met once before where there has been less than 3.5 MAF in storage at the end of April. (*Id.*, ¶ 38.) This does not bode well for temperature management efforts in the coming year. But that projection certainly does not mean the court should choose to implement an even more onerous standard. *NWF III*, 886 F.3d at 823 ("It is not an abuse of discretion for a court to issue an injunction that does not completely prevent the irreparable harm that it identifies."); *Turtle Island*, 834 F. Supp. at 1019 ("Provided that the proposed consent decree is fair, reasonable, and equitable, and does not violate the law or public policy, it need not utilize the best scientific evidence. Such a requirement would transform evaluation of a proposed consent decree into a decision on the merits in contravention of controlling authority.").

(2022 IOP Order at 87–89.) As the Court later summarized:

> In sum, record evidence about the water supply situation in 2022 suggested that PCFFA's alternative temperature targets could not be met during the 2022 temperature management season. Second, even acknowledging that, all other things being equal, colder temperatures are better for egg and fry survival, there are tradeoffs to imposing colder temperature requirements in dry years. Most directly, lowering a temperature target can influence the length of time managers can keep temperatures from rising to dangerously high levels. In addition, lower temperature targets can make it more difficult to conserve storage for use in the following year's temperature management season. ([2022] IOP Order at 53, 88.)

(2023 IOP Order at 59–60.)

In 2023, PCFFA argued that because the water supply situation going into WY 2023 was somewhat improved over the previous year, the Court's feasibility rationale was no longer valid. The Court "d[id] not see things that way." (*Id*. at 60.)

> First, as discussed in the quote above, PCFFA's own expert witness indicated that end of April storage likely would have to reach 3.5 MAF to make meeting PCFFA's Critical year temperature target of 54.5ºF feasible; 3.9 MAF would be required to meet the 53.5ºF target PCFFA seeks to impose in Dry or Below Normal years. (*See* 12/16/21 Rosenfield Decl., ¶ 37.) The Court previously indicated in the 2022 IOP Order that those same storage circumstances would likely coincide with circumstances that would push the water year classification out of those respective categories anyway. (*See* 2022 IOP Order at 113 n. 71; *see generally* 1/26/23 Conant Decl., ¶ 3.a & Ex. 1.) Put another way, if the water supply situation approaches the levels that might make it possible to meet PCFFA's temperature targets, it seems likely that the water year will also shift toward wetter classifications that will render PCFFA's proposed targets inapposite or irrelevant.
>
> Moreover, the tradeoff rationale offered in the 2022 IOP Order remains valid. As the Court explained, (*see* 2022 IOP Order at 84–87), Water Project managers must balance the goal of temperature control in a given year against the ***often conflicting*** but nonetheless important goal of maintaining sufficient carryover storage to ensure temperature control in the subsequent year. The IOP's prioritization system that applies in Critical and Dry years is designed—at least in theory—to help maximize the amount of water available to attain both goals. But maximizing available water does not change the fact that in any given year maintaining current-year temperatures can conflict with planning for the next year. This means, ipso facto, that applying PCFFA's lower temperature targets in WY 2023 may make it more difficult to ensure sufficient cold water for WY 2024, and vice versa. PCFFA offers no clear, direct response to the Court's prior conclusion that the IOP offers a more balanced answer to this conundrum nor to the Court's ultimate conclusion that the IOP is reasonable because it operates as a procedural mechanism that maximizes the chances of "increasing the size of the pie" available to achieve the dual goals of temperature control and carryover storage.
>
> The Court reiterates its concern expressed above that no one seems to yet be able to articulate why winter-run survival was so poor in 2022. Neither the temperature dependent mortality modeling for 2022, which Federal Defendants and PCFFA continue to focus on, nor the available data about thiamine deficiency can fully account for these losses. PCFFA in fact cites the one government agency document that posits a theory: The October 13, 2022 Summary from the Sacramento River Temperature Task Group, which indicates that background mortality of juveniles might be "a lot higher" in 2022 because of "turbidity and low flows." (Doc. 417-14.) As discussed above, the Court is not yet convinced by Mr. Cavallo's arguments that the modestly more protective temperature targets of the IOP

> should be abandoned for an approach that focuses even less on temperatures, [yet] requiring that the Water Projects operate in dry years to PCFFA's alternative temperature targets and carryover storage requirements could make flow concerns *worse*, not better. To come full circle, the Court lands in the same place it did previously, with a finding that the IOP represents the most reasonable approach, albeit an imperfect one, to protecting the winter-run given the available information.

(2023 IOP order at 60–61.) As discussed above, there is a vanishingly small chance that the coming year will qualify as Critical or Dry. Therefore, the Court finds it unnecessary to address PCFFA's 2024 requests as to those year types.

As to the remaining aspects of PCFFA's temperature target proposal (for Below Normal, Above Normal, and Wet years), the Court's thinking has not changed materially, despite changed water supply conditions. There is no dispute that storage conditions have improved notably over those prevailing at the time the Court approved either prior IOP. As Reclamation witness Ms. White opines, "Shasta Reservoir began Water Year 2024 with over 3.3 MAF, and it has a high chance of starting the 2024 temperature management season with adequate storage for meeting similar goals as those set in the Temperature Management Plan in Water Year 2023. (2/21/24 White Decl., Doc. 500-2, ¶ 5.) Nonetheless, "if conditions turn dry or very dry for the remainder of the precipitation season, Shasta Reservoir may not be in a position to provide the same temperature management it did in Water Year 2023." (*Id*.) As the Court indicated previously, if the water supply situation "approaches the levels that might make it possible to meet PCFFA's temperature targets, it seems likely that the water year will also shift toward wetter classifications that will render PCFFA's proposed targets inapposite or irrelevant." (*Id.* at 60.) The reverse is equally true. Should conditions "turn dry or very dry," the balancing act discussed by the Court in its prior orders may again come into play.

PCFFA is correct that this Court has previously found its slightly lower temperature targets to be "biologically appropriate," but PCFFA continues to somewhat overplay the consequences of that finding, at least in the context of these interim relief proposals. It is true that the record evidence indicates that PCFFA's ideal 53.5°F temperature target "would help ensure (if met) very low temperature dependent mortality" (Doc. 394 at 87) and that temperature dependent

mortality increases –possibly exponentially—above that temperature threshold. (Doc. 389 at 157–58.) But the *marginal* difference PCFFA's *half a degree change* would make for the amount of suitable habitat available to winter-run Chinook and most importantly for temperature dependent mortality remains unclear. When balanced against the various tradeoffs discussed in the Court's prior orders, the Court finds that the requested change to the management regime for Below Normal years is not required for the Court to find the 2024 IOP "reasonable" nor has PCFFA otherwise demonstrated it is necessary to avoid irreparable harm.

As for PCFFA request to expand the IOP's temperature provisions beyond the dryer year types covered by the proposed 2024 IOP to also require Reclamation to achieve 53.5ºF in Above Normal and Wet years from May 15 through October 31, the Court finds that PCFFA has not explained why the modification is needed given that the 2019 NMFS BiOp's Tiered system appears to provide for essentially the same practical result.

b) PCFFA's Alternative Carryover Storage Requirements

PCFFA also requests carryover storage requirements that depart from the proposed 2024 IOP as follows.

Year Type	2024 IOP Proposal	PCFFA Proposal
Critical	1.2 MAF to 2.8 MAF	1.9 MAF
Dry	1.8 MAF to 2.5 MAF	2.2 MAF
Below Normal	2.5 MAF – 3.2 MAF	[No alternative proposed]
Above Normal	[None given]	2.9 MAF
Wet	[None given]	3.0

(*See* Doc. 492-2, ¶ 17.ii.)

Again, because the water supply situation has rendered it highly unlikely that WY 2024 will be classified as Critical or Dry, the Court will not address PCFFA's alternative carryover storage proposal for those year types. PCFFA does not propose an alternative carryover storage requirement for Below Normal years. As for Above Normal and Wet years, PCFFA essentially offers no justification for adding these provisions to the IOP apart from the argument that the goals are "attainable" this time around. (*See* Doc. 492 at 20 (offering scientific evidence related to

carryover storage proposal for drier year types but not for proposal related to Above Normal and Wet years).)

c) Stored Water Loophole

PCFFA asks the Court to address what it considers to be a loophole in the 2024 IOP's prioritization system applicable in Critical and Dry years. Again, because it is highly unlikely that either of those year types will be declared, the Court declines to address this nuanced and complex argument.

d) Conclusion Re 2024 Shasta Provisions

In sum, for the reasons set forth above, the Court again finds the 2024 IOP provisions are substantively reasonable. They represent a balanced approach to the ongoing risk to salmonids that spawn in the reaches below Shasta Dam. In particular, the provisions that apply in drier years should be in place in case conditions turn drier than expected. The alternative proposals are either inapplicable, unsupported, or not reasonable.

Nonetheless, the Court will once again require Federal Defendants to file on the docket of these cases a copy of the draft and final TMPs for 2024, along with a justification for any planned departures from the IOP's temperature targets. As it has previously indicated (2023 IOP Order at 64) in requiring such a filing, the Court is exercising its inherent authority to monitor compliance with its own orders.

c. *PCFFA's renewed request to bar Reclamation from seeking exemptions from California's Water Quality Standards unless deliveries are curtailed*

PCFFA again asks the Court to prohibit Reclamation from seeking waivers from state Water Quality Standards until Reclamation first curtails, to the extent of its discretion, water deliveries and water diversions to all CVP contractors, except for deliveries necessary for human health and safety and for wildlife refuges. (*Id*., ¶ 19.) The Court's prior reasoning on this subject provides context for PCFFA's renewed arguments:

> PCFFA's proposed injunction also contains a provision that would require Reclamation to comply with "the provisions of the State Water Resources Control Board's Water Rights Decision 1641 [(D-1641)] applicable to the State Water Project and Central Valley Project, including requirements relating to Delta inflows, Delta

outflow, X2, and closures of the Delta Cross Channel Gates." (*PCFFA* PI ¶ 5.)

D-1641, which is binding on Reclamation, is designed to control salinity in the Bay Delta to ensure water quality. (*See supra* footnote 32.) Compliance with D-1641 was a "baseline" condition built into the 2019 BiOps. (*See* Doc. 322 at 10–11 (providing record citations).) In other words, harms to fish were evaluated in those BiOps based upon the assumption that the prescriptions contained within D-1641 would be implemented.

In recent years, due to drought conditions, Reclamation and DWR have [used TUCPs to seek permission] from the State Board [ ]to deviate from D-1641. (*See, e.g.*, Doc. 272-4.) [ ] One of the primary reasons given for applying for (and approving) the TUCPs is to preserve cold water behind the dams in the system designed to protect fish later in the year. (*See generally id.*) This has tradeoffs for water quality and flow downstream, and the State Board has acknowledged this reality in approving past TUCPs. In particular, in approving TUCPs, the State Board has specifically acknowledged the potential harm posed to Delta smelt as a result. (*Id.* at 19.)

PCFFA's proposed injunction would have Reclamation comply with D-1641 even if it receives a waiver of D-1641's requirements from the State Water Resources Control Board. (PCFFA PI ¶ 5.) Under PCFFA's revised proposal, even this provision appears to be subject to the new "best efforts" exception language. As noted previously, under that language, if Reclamation is unable to meet PCFFA's Shasta targets or D-1641's requirements despite "best efforts" to do so, and despite "curtailing water deliveries and releases for diversion" to the "extent permitted by law," Reclamation could deviate from the injunctions' requirements, provided Reclamation meets and confers with the parties as soon as possible. (PCFFA PI at 3.)

When the initial briefs were filed regarding these injunctive relief motions, Reclamation and DWR had a TUCP pending before the State Board that would apply this spring. (*CNRA* Doc. 252-1, Ex. 5.) They have since withdrawn that petition. (*Id.*) As a result, there is now no immediate danger of a TUCP this year. Nonetheless, PCFFA has still expressed its concern because nothing prevents Reclamation and DWR from filing another TUCP. (*See* Doc. 368 at 11.)

The court understands PCFFA's point in this regard. The BiOps assume that the actions required by D-1641 will be implemented. Because those actions are protective of fish, that is a material aspect of the baseline that the BiOps use to evaluate whether or not the Water Projects will cause jeopardy/adverse modification under the ESA. No party before the court suggests that the BiOps meaningfully considered how fish would be impacted by any TUCPs, let alone by the increasingly frequent use of TUCPs. But, PCFFA's proposal—that the court prohibit Reclamation from applying for TUCPs unless it jumps through certain identified hoops—is not a reasonable or particularly helpful response to this asserted failure. PCFFA's proposal appears to be designed to require Reclamation to do

> absolutely everything else in its power to meet temperature requirements for winter-run before applying for a TUCP. The court has already explained why it believes the IOP's process provides a reasonable mechanism for ensuring just this, by requiring Reclamation to prioritize the needs of winter-run habitat over water deliveries to the extent it can do so consistent with the law and its contractual obligations. PCFFA's proposal would appear to presume that Reclamation will try to evade or perform some sort of slight-of-hand with regard to these self-imposed priorities through the mechanism of applying for TUCPs. In the court's view, however, it seems far more likely that a TUCP may be the only way Reclamation can provide suitable temperatures for winter-run this coming season.
>
> Moreover, the TUCP approval process already requires the State Water Resources Control Board to consider the various species-versus-species tradeoffs in question here. (Doc. 343-1 at 11–12 (*amicus curiae* brief explaining TUCP process).) The State Board is also required to consider a number of other interests in the balance when evaluating TUCPs. (*Id.*) No matter how PCFFA attempts to describe this aspect of its proposed injunction, adopting it would be an invasion by this court into the State Board's process. The court will not do so on the present record, which does not justify the undertaking of such an extraordinary measure.

(2022 IOP Order at 116–18.)

PCFFA's concerns did not abate in 2023. Despite improved hydrology, Federal Defendants and DWR again filed a TUCP in early 2023 in part in an effort to recover state water supplies from the then-recent drought conditions. (*See CNRA* Doc. 320, Ex. 2.) PCFFA again argues that Water Project managers should be prohibited from seeking waivers from the requirements of D-1641 unless and until "Reclamation [ ] curtail[s], to the extent of its discretion, water deliveries to, water supply allocations for, and water diversions by all contractors of the Central Valley Project . . . ." with certain exceptions. (Doc. 416-2.) PCFFA pointed out that the analysis included in the TUCP itself indicates that the TUCP could expose salmonids and Delta smelt to additional entrainment risk. (*See* 2023 IOP Order at 68.) 2/13/23 TUCP at p. 2-20). At the same time, other information suggested these impacts would be minor. (*See id*.) On balance, the Court concluded that PCFFA's broad requested relief was again not justified, though it expressed ongoing concern about the overall issue:

> To the extent there was any doubt previously, PCFFA has now underscored its point about the interplay of TUCPs and the BiOps at issue in these cases. Because the BiOps rely heavily on state regulatory requirements such as D-1641 as baseline regulatory constraints protective of listed species, frequently modifying those

> constraints raises serious questions about whether the BiOp's can reasonably rely on those protections. But that does not mean the needle has moved sufficiently in favor of the relief PCFFA is requesting in the present motions. To be clear, PCFFA is requesting that the Court prohibit Reclamation from petitioning the SWRCB—the California entity charged with regulating water quality—for relief from the requirements of D-1641 unless and until Reclamation first curtails "to the extent of its discretion, water deliveries to, water supply allocations for, and water diversions by all contractors of the Central Valley Project," except those necessary to preserve health and human safety and wildlife refuges. This remains a truly extraordinary request that is not justified under the circumstances for the reasons the Court explained in its prior order.

(2023 IOP Order at 68–69)

PCFFA's briefing provides additional information about the use of TUCPs in 2023. After approving the above-mentioned TUCP in early 2023 in light of the "urgent need for the proposed changes," the State Board later found that improved hydrology rendered impacts to protected fish and wildlife no longer reasonable. (Chisholm Decl., Ex. V (State Board TUCP March 2023 Modification Letter), Doc. 495-6 at p. 2.) In addition, the State Board approved a separate TUCP in early March 2023 that allowed otherwise unpermitted diversions from the San Joaquin River in order to allow for greater groundwater basin recharge. (Chisholm Decl. Ex. H (2023 Friant TUCP approval order), Doc. 493-8.) PCFFA points out that the State Board's order approving that TUCP acknowledged the possibility that the change would reduce survival of juvenile spring-run Chinook salmon out-migrating to the ocean. (*Id*. at 11–13.)

Considering all of this information, PCFFA suggests that the Court's previous hesitation to interfere in the TUCP process was inappropriate (or at least should not be repeated) because "it is neither the State Board's role nor responsibility to enforce ESA requirements. That is a question for the Court in considering whether and how to modify Federal Defendants' proposed IOP to ensure that Water Project operations do not jeopardize listed species this year." (Doc. 492 at 22–23.) The Court will not regurgitate all of its prior rulings on the subject of how ESA "jeopardy" should be considered in the context of injunctive relief, but will reiterate one point it made in a footnote in 2022:

> Jeopardy" is a term of art drawn from the ESA's consultation requirement, which requires that "[e]ach Federal agency shall, in consultation with and with the assistance of [FWS or NMFS], insure

> that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species." 16 U.S.C. § 1536(a)(2). The consultation process set forth in that section of the ESA is what led to the long line of BiOps, culminating in those challenged in this case. The 2019 BiOps contain approximately 1300 pages of analysis aimed at evaluating whether the Water Projects will cause "jeopardy" or "adverse modification." From a purely practical perspective, given the complexity of the jeopardy/adverse modification analyses performed in the equally complex biological opinions, it is unclear how a court could possibly evaluate whether a proposed injunction "avoids jeopardy" within a reasonable timeframe. In its role in equity, a court can, at best, hope to incorporate into its harm/reasonableness analyses relevant evidence presented to it regarding the impacts upon the viability and recovery of species. Nonetheless, any such effort would never come close to the full "jeopardy" analysis required in a biological opinion.

(2022 IOP Order at 67 n. 53)

The process of creating a biological opinion is, at least in the first instance, where the concept of "jeopardy," as that term has long been applied in these cases to capture longer term changes in population size and extinction risk, must be thoroughly and completely evaluated. As the Court has indicated numerous times, previous biological opinions have relied upon State Water Quality standards as background protection upon which other protections are layered. The well-demonstrated, persistent use of TUCPs to evade these requirements cannot be glossed over. But this does not mean the Court must or should prohibit their use in the context of the 2024 IOP, which is only a "stop-gap" measure meant to bridge the gap until new biological opinions are issued. This is particularly so in the total absence of any specific TUCP proposal this water year. The Court will not issue the modification PCFFA requests based on a non-specific concern that a hypothetical TUCP will cause irreparable harm.

d. *2024 IOP's Delta Operations Provisions*

As with the Shasta operational provisions of the 2024 IOP, only certain Delta-related provisions actually remain in play for WY 2024. Of those provisions, fewer still are actually in dispute in the parties' 2024 IOP briefs. As to any provisions that may be applicable this year, but which are not discussed in the parties' 2024 IOP briefs, the Court incorporates by reference its prior analyses of those provisions.

i. Turbidity Bridge Avoidance Measure

As mentioned, the 2024 IOP contains a provision to harmonize how Reclamation and DWR implement the previously-approved turbidity bridge avoidance measure. (2024 IOP, ¶ 8.) No party has formally objected to this adjustment.

ii. Longfin OMR Provisions

The 2024 IOP calls upon Reclamation to abide by four provisions aimed at protecting Longfin smelt. (2024 IOP, ¶ 6.i-iv.

a) ITP Condition of Approval 8.3.3 will not control this Water Year and Condition 8.4.1 has expired

ITP Condition of Approval 8.3.3 calls for the OMR flows to be limited after December 1, if not otherwise required by separate provisions, to maintain a 14-day average OMR index no more negative than -5,000 cfs if monitoring indicates a certain number of Longfin smelt have been salvaged at the CVP and SWP export facilities or if other factors indicate a high risk of Longfin smelt entrainment at those facilities. (State ITP, § 8.3.3, p. 81.) But, the IOP and the 2019 BiOps already require OMR flow to be no more negative than -5,000 after March 1 (*see* 2023 IOP Order at 72), so ITP Condition of Approval 8.3.3 will have no practical effect for the remainder of this Water Year.

ITP Condition of Approval 8.4.1 applies additional OMR restrictions to protect Longfin Smelt "from the onset of OMR Management . . . through February 28." (State ITP, § 8.3.3, p. 82.) Thus, this provision has expired for this water year. Even if the Court were to adopt PCFFA's suggested modification of Condition 8.4.1 so that it extended through the end of March, by the time this order issues, even that extended version of the Condition will have expired.

b) ITP Condition of Approval 8.4.2.

Under the 2024 IPO, Reclamation has also agreed to adopt and implement ITP Condition of Approval 8.4.2, which is designed to protect against larval and juvenile Longfin smelt entrainment. (2024 IOP, ¶ 6.iii; State ITP § 8.4.2, p. 82–84.) By its own terms, Condition 8.4.2 is applicable from January 1 through June 30 and is triggered when either, (a) certain surveys indicate that Longfin smelt larvae or juveniles have been found in four or more of the twelve set

sampling locations in the central and south Delta, or (b) Longfin smelt catch during these samples exceeds five Longfin smelt larvae or juveniles in two or more of the twelve sampling stations. (State ITP § 8.4.2.) If either of these thresholds is triggered, DWR and Reclamation shall restrict water project exports for seven consecutive days to maintain a seven-day average OMR index no more negative than -5,000 cfs. (*Id*.) In addition, managers conduct weekly (or more frequently if needed) assessments of larval and juvenile Longfin smelt entrainment risk, and may recommend additional OMR flow limits between -1,250 and -5,000 cfs. (*Id*.; see also 12/22/23 Marcinkevage Decl., ¶ 7.)

The stated purpose of this provision is to protect larval and juvenile Longfin smelt from entrainment at the south Delta pumping facilities. (*Id*.) This purpose is reiterated elsewhere in the record, including the declaration of Randall D. Baxter, a retired California Department of Fish and Wildlife employee with considerable expertise in Longfin smelt biology and population dynamics. (12/22/23 Baxter Decl., Doc. 482-7, ¶¶ 1–10.) Mr. Baxter indicates that Longfin smelt larvae, which hatch primarily between late December and early April, are weak swimmers and thus are "particularly at risk if they hatch within the influence of the south Delta water export pumps." (*Id*., ¶ 17.) After hatching, the larvae are slow growing and remain dependent on the net currents they encounter for the first several days post hatching. (*Id*., ¶ 18.) In Baxter's opinion, the fate of any Longfin smelt hatching in the lower San Joaquin River is tied to flow:

> Those hatching in the lower San Joaquin River are either drawn into the south Delta by strongly negative Old and Middle River flows (OMR; export pumping causes currents in the Old and Middle River channels to flow upstream [negative] toward the pumps) or they are transported downstream toward Suisun Bay when river flows exceed export flows and net flow in the lower San Joaquin River becomes strongly positive (≥5,000 cfs). Hydrodynamic modeling suggests that once particles are drawn into the Delta south of the San Joaquin River channel, they are unlikely to be "flushed out" and transported to Suisun Bay by high flows. So once drawn into the south Delta, larvae are either eventually entrained in exports, they die within the south Delta or they survive and grow sufficiently large (20 mm) to be salvaged or at 15-20 mm they become competent enough to migrate out of the south Delta. It is believed that this emigration is initiated by increasing temperatures in the 20-22°C range beginning May through June and creating an increasingly stressful environment.

(*Id*., ¶ 18.) Put simply, while other Conditions of Approval are designed to prevent adult Longfin

smelt from moving into (and possibly spawning in) areas of high risk (*id*., ¶ 24–25.), Condition of Approval 8.4.2 is designed to sample for larval presence at certain densities and limit entrainment of larvae and juvenile Longfin smelt.

The record suggests that "salmon and steelhead juveniles could benefit from less negative OMR flows because the timing of the actions overlaps with the presence of these species in the Delta, and less negative OMR flows can decrease the risk of entrainment and loss at the export facilities for salmon and steelhead," (12/22/23 Marcinkevage Decl., ¶ 8), but no party provides specifics about how much of a benefit to salmonids this would provide or how important that contribution would be to salmonid survival. Relatedly, no party disputes that Longfin smelt protection is the primary purpose of Condition 8.4.2.

The State Plaintiffs advance several general arguments in favor of a finding that inclusion of Condition 8.4.2 in the 2024 IOP is "fair, reasonable and equitable and [would] not violate the law or public policy." (Doc. 482 at 17–18.) First, they point out that Longfin are need of protection due to population declines, as State agencies have recognized and the record here supports. (*Id*. at 17; *see supra* Part II.B.) State Plaintiffs also argue that the Longfin smelt provisions in the 2024 IOP come "within the general scope of the case made by the pleadings" because the CNRA FAC alleged that Federal Defendants were violating CESA. (Doc. 482 at 17 (citing *Hawaii's Thousand Friends*, 149 F.R.D. at 616).) Indeed, CNRA's fifth claim for relief alleges that Reclamation violated the APA by conducting CVP operations without complying with CESA. (*CNRA* FAC, ¶¶ 145–54.) Though CESA is a state law, CNRA alleges that CESA is enforceable against Reclamation by virtue of other provisions of federal Reclamation law, including Section 8 of the Reclamation Act of 1902, which expressly requires Reclamation to "proceed in conformance" with state water law. (*Id*.) This claim was the subject of extensive motions to dismiss (*see CNRA* Docs. 117, 119, 121–22, 130–31, 136–38, 141), which were not resolved prior to voluntary remand of the challenged biological opinions. Finally, State Plaintiffs emphasize that the Longfin smelt provisions are not inconsistent with the ESA, (Doc. 482 at 18), a point that no party refutes.

Defendant Intervenors object vigorously to approval of any of the Longfin smelt

provisions on various grounds. (Doc. 485 at 17–21.) Of particular note, Defendant Intervenors argue that courts reviewing consent decrees relating to federal environmental laws have only approved those decrees that "reverted to prior agency decision or, at most, modestly extended prior agency action." (*Id*. at 19.) For example, the consent decree at issue in *Conservation Northwest v. Sherman*, 715 F.3d 1181, 1185 (9th Cir. 2013), effectively resulted in a permanent amendment to a federal Forest Plan. The Ninth Circuit refused to approve that consent decree in part because the settling parties could "simply let the [changes] stand indefinitely" without first complying with applicable procedural rulemaking requirements. *Id*. at 1187.[26] In contrast, the consent decree approved in *Turtle Island*, 672 F.3d at 1168, restored parts of a prior regulatory regime during a remand period, essentially functioning as a "stop-gap" measure "while the agencies amended their regulations through existing administrative procedures." *Sherman*, 715 F.3d at 1187 (discussing *Turtle Island*). Likewise, in *Defenders of Wildlife v. Jewell*, 2016 WL 7852469, at *4 (D. Ariz. Oct. 18, 2016), the consent decree set a deadline for development of a recovery plan for a species but did not "set forth substantive provisions of a recovery plan or otherwise mandate any particular aspect of recovery." Citing these cases, Defendant Intervenors argue that the 2024 IOP should not be approved because it seeks to protect an entirely new species not covered by the challenged 2019 biological opinions and 2020 Record of Decision and "thus significantly departs from the status quo." (Doc. 485 at 20.)

Though the caselaw does not appear to absolutely prohibit approval of consent decrees that depart from the status quo, the Court considers the Longfin smelt provisions to be a significant departure from the other IOP provisions and finds that departure to be relevant to the reasonableness analysis. "As *Sherman* made clear, each consent decree is evaluated on its own merits, and there are unique features to this one." *Idaho State Snowmobile Ass'n v. U.S. Forest*

[26] The Court will not revisit in full its lengthy prior analysis of *Sherman*, which arose in the context of Defendant Intervenors' arguments that the various iterations of the IOP should have been subjected to analysis under NEPA. (2022 IOP Order at 76–79.) In sum, the Court previously found that *Sherman* did not demand that the IOP be subjected to NEPA analysis (or other procedural rulemaking requirements) because the IOP does not operate as a substantial and permanent amendment to a prior regulatory regime. (*Id*. at 79 ("The Ninth Circuit's holding in *Sherman* indicates that a court would abuse its discretion only by approving a consent decree that "permanently and substantially" amends an agency's prior rule. The IOP does not do both and is therefore governed by the Ninth Circuit's decision in *Turtle Island*, which does not require strict compliance with statutory procedural requirements in order to be approved by the court.").) The argument presented here is a related but distinct one.

Serv., No. 3:12-CV-447-BLW, 2015 WL 807104, at *3 (D. Idaho Feb. 26, 2015). The circumstances pull in several directions here. On the one hand, as mentioned, the record supports a finding that Longfin smelt legitimately require additional protection against further population declines and that the claims in the *CNRA* case seek to require Federal Defendants to abide by CESA mandates designed to provide those protections. It is also true that the 2024 IOP is a compromise of that (and other) disputed claims, (*see CNRA* Doc. 348 at 4), and that to approve a consent decree, the Court need not reach and resolve the merits of the claim or controversy. *Citizens for a Better Env't v. Gorsuch*, 718 F.2d 1117, 1126 (D.C. Cir. 1983). Moreover, Federal Defendants have proposed Longfin smelt for listing under the ESA and are engaged in active consultation pursuant to regulations designed to anticipate protective measures for species in the ESA listing pipeline. (*See supra* Part II.B.)

On the other hand, the Court cannot avoid the obvious: Longfin smelt are not yet listed under the ESA and it remains unclear when, or even if, they will attain that status. Moreover, apart from the fact that employees of FWS—the agency ultimately responsible for determining what measures may be required to protect Longfin smelt from jeopardy if they ultimately are listed—support the inclusion of the Longfin smelt provisions in the 2024 IOP, the record does not contain information suggesting what protective measures will be required under the ESA, nor whether they will be substantially identical to those included in the 2024 IOP.

In addition, Federal Defendants have never before accepted the premise that a CESA listing is grounds for the imposition of restrictions upon the operation of a federal water project. Relatedly, Defendant Intervenors argue that Federal Defendants cannot lawfully impose such restrictions on the CVP if doing so would require Federal Defendants to violate provisions of the CVPIA and the COA that call upon Federal Defendants to export and deliver as much water as possible during times of "balanced conditions." (*See generally* Doc. 485.)

Layered on top of the above complexities is the fact that it remains unclear if Condition 8.5.2 would control any aspect of the projects this water year, even if the Court were to approve its application to Reclamation and the CVP. Dr. Hanson indicates that in recent years, even when larval protections have been triggered under 8.4.2, other OMR restrictions aimed at preventing

salmonid entrainment instead controlled project operations. (1/31/24 Hanson Decl., Doc. 486, ¶ 27.) Moreover, he opines that the proportion of the Longfin smelt population lost to water diversions is thought to be very small: approximately 1.5% according to a study cited by Dr. Hanson. (*Id*., ¶ 28.)

Perhaps sensing that the Court might have concerns about imposing a Longfin smelt provision on Reclamation as part of the 2024 IOP, the State Plaintiffs attempt to suggest that these provisions are not a departure from the status quo because they operate according to a familiar mechanism, namely reducing exports to reduce negative (i.e. backwards) flow in OMR if certain risk triggers are met. (Doc. 482 at 15–16.) FWS witness Kaylee Allen also explains that Condition 8.4.2 utilizes the same "operational premise" behind the previously-approved IOP Delta operations protections for salmonids and Dela smelt, namely that if certain triggers are met OMR flows are managed to prevent species from being drawn into the southern Delta, where they face increased risks. (12/22/23 Allen Decl., ¶ 10.) The Court does not find these arguments particularly compelling. Though the mechanism may be the same, its target is not.

Relatedly, State Plaintiffs reiterate the general, independent justification given for the entire IOP: that it will improve coordination between the Reclamation and DWR. Defendant Intervenors dispute that there will be material gains from coordination in the context of the Longfin smelt provision. Even assuming improved coordination would avoid inefficiencies, the Court's obligation to ensure that any remedy is narrowly tailored means that improved coordination cannot on its own justify the imposed measure(s). In evaluating this aspect of the proposed 2024 Consent decree, the Court is again cognizant that the substantive fairness inquiry "is nothing more than an amalgam of delicate balancing, gross approximations and rough justice." *Oregon*, 913 F.2d at 581 (internal quotations omitted). On balance, the Court finds that the Longfin smelt provisions are not a reasonable extension of the prior IOPs because they depart from past patterns and will impose upon the CVP protections for a species not yet listed under the ESA.[27] Obviously, a change in the ESA listing status of the Longfin smelt could alter this

[27] The Court does not intend for this to be an expression of its legal opinion on the applicability of CESA to Reclamation. That question remains unresolved.

balance.

c) ITP Condition of Approval 8.4.3

ITP Condition of Approval 8.4.3, provision provides an "offramp" procedure, essentially an exception, to the other OMR restrictions for Longfin smelt. (2024 IOP, ¶ 6.iv; State ITP § 8.4.3 at p. 84.) Given that the Court will not be approving the inclusion of the (not otherwise expired) Longfin smelt provisions of 2024 IOP, there is no need to separately address this offramp condition.

d) Defendant Intervenors' alternative request for the Court to condition approval of the Longfin Smelt protections

Defendant-Intervenors advanced an alternative request that Court approval of the Longfin smelt provisions "does not thereby authorize any export reduction during excess conditions (as such action that would violate CVPIA section 3411(b)), nor does it excuse Federal Defendants from any breach of contractual obligations." (Doc. 504 at 15.) Because the Court will not approve those provisions, this alternative request is moot, as is Federal Defendants' motion to strike the request as untimely. (*See* Doc. 508.)

iii. Spring Outflow Provision

The 2023 IOP contained a provision that required Reclamation to reduce exports in the event the Water Year is classified, based on the San Joaquin Valley 60-20-20 index, as Critical, Dry, or Below Normal, to contribute to the implementation of State ITP Condition of Approval 8.17. (*See* Doc. 482-2, ¶ 12.) The 2024 IOP adds to that a requirement that Reclamation reduce exports by 100,000 AF in the event the Water Year is classified as Above Normal (*Id.*, ¶ 12.) The State ITP in turn provides additional detail about the function and purpose of Condition of Approval 8.17. (State ITP § 8.17 at pp. 102–104.) Generally, the Condition continues implementation of the so-called "I:E Ratio" that has been utilized in prior measures to protect listed species. (*See* 2023 IOP Order at 74; 2022 IOP Order at 40–41 (providing background on I:E ratio, explaining that it was not included in the 2019 NMFS BiOp, and that both the 2022 IOP and PCFFA's competing proposal sought to re-impose an I:E ratio).) In 2022, having previously found the scientific basis for the I:E Ratio to be sound, the Court rejected challenges to inclusion

of the Ratio in that year's IOP. (2022 IOP Order at 97–98.) The Court did so again in 2023 in part because the parties advanced no substantive objections to it. (2023 IOP Order at 74.)

This year, the only objection articulated by Defendant Intervenors to the modified version of this requirement is that it would benefit Longfin smelt. The IOP itself states that this provision is "intended to benefit Longfin smelt, Spring-run Chinook Salmon, Winter-run Chinook Salmon and Central Valley Steelhead." (*Id*.) Given the record evidence discussing the benefits of this provision for ESA-listed fish (*see* 2022 IOP order at 98), the Court finds this argument disingenuous at best. Absent any other substantive objections,[28] the Court finds no reason to depart from its prior rulings with regard to the IOP's adoption and implementation of ITP Condition of Approval 8.17.

B. Public Interest

Finally, applying the consent decree standard, before approving the IOP, the Court must ensure that the consent decree furthers the public interest. *See PG&E*, 776 F. Supp. 2d at 1029. Whether a consent decree is within the public interest in part depends on whether it is "consistent with the statute that the judgment was meant to enforce." *Turtle Island*, 834 F. Supp. 2d at 1019 (quoting *Gorsuch*, 718 F.2d at 1128). As the 2022 IOP Order explained, "the primary statute at issue here is the ESA, although CESA is also arguably relevant." (2022 IOP Order at 105-106 & n. 67 (explaining that the goals of CESA are substantially identical to those of the ESA and that while some of the claims in this case arise under NEPA, NEPA has not been the focus of briefing in relation to approval of the IOP or any of the alternative requests for injunctive relief).)

The 2022 IOP Order concisely explained why the IOP was generally consistent with the ESA, having earlier detailed how the 2022 IOP's provisions operate to provide additional protections for listed species above and beyond those contained in the 2019 BiOps:

> The ESA's stated purposes are "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved . . . ." 16 U.S.C. § 1531(b); *see also Hill*, 437 U.S. at 174 ("[E]xamination of the language, history, and

[28] Defendant Intervenors do object generally to the water supply impact of reducing exports by 100,000 AF, (Doc. 485 at 13, 22), and somewhat more specifically to the notion that this reduction would materially benefit Longfin smelt. (*Id*. at 13.) But they do not specifically contend that the I:E ratio implemented by State ITP Condition of Approval 8.17 is not narrowly tailored to the needs of the salmonids it is expressly designed to aid.

> structure of the [ESA] indicates beyond doubt that Congress intended endangered species to be afforded the highest of priorities."). While a consent decree (or a stipulated injunction by analogy) must be "consistent with" the relevant statutes, it need not provide all of the relief a party might otherwise be entitled to under those laws. *See Ctr. for Biological Diversity v. Bureau of Land Mgmt*., No. C 00-00927 WHA, 2001 WL 777088, at *6 (N.D. Cal. Mar. 20, 2001) (acknowledging that while the plaintiff might have been entitled to "significant injunctive relief" had they proven all alleged ESA violations at trial, the consent decree's terms represented "compromise and ongoing negotiation" to, for example, allow "limited expansion of mining"). For all of the reasons set forth above, the court concludes that the terms of the IOP are consistent with the ESA.

(2022 IOP Order at 106.)

For the reasons set forth in the 2022 IOP Order, reiterated in the 2023 IOP Order, and in the Court's reasoning above, it reaches the same conclusion again. Given all of the information before it, with the exception of the Longfin smelt provisions, the IOP represents an appropriate approach because it is more protective in key ways than the 2019 BiOps. Though these additional protections may not solve all of the physical and biological problems facing the listed species, the alternatives offered by the objecting parties are more inappropriate.[29]

VI. ANALYSIS OF PCFFA'S INJUNCTIVE RELIEF PROPOSAL

As PCFFA correctly points out again (Doc. 492 at 15 n. 7), the Court may adopt—if it deems doing so to be appropriate—elements of its proposed alternative relief in addition to the terms of the 2023 IOP under the more traditional injunctive relief standards. However, the Court has already explained above why it believes certain of the additional protections proposed by PCFFA are not appropriate. For the same reasons, the court declines to impose those provisions as independent forms of injunctive relief.

VII. BOND REQUIREMENT

Federal Rule of Civil Procedure 65(c) provides

[29] The Court again acknowledges that the 2022 IOP Order found that "the duration of the stipulation should be considered in the overall fairness analysis and that interim agreements of shorter duration—even ones that have not complied with rulemaking procedures—may well be accepted and approved by the court." (2022 IOP Order at 79 (citing *Am. Forest Res. Council v. Ashe*, 946 F. Supp. 2d 1 (D.D.C. 2013).) The 2022 and 2023 IOP Orders concluded that the fact that the IOPs have extended over multiple years is not surprising nor dispositive. (*See* 2023 IOP Order at 77 n. 66.)

> Security. The court may issue a preliminary injunction or a temporary restraining order only if the movant gives security in an amount that the court considers proper to pay the costs and damages sustained by any party found to have been wrongfully enjoined or restrained. The United States, its officers, and its agencies are not required to give security.

Here, the only injunctive relief being imposed is at the request of the entities subject to the injunction, namely the federal and state agencies that operate the CVP and SWP, respectively. Under these circumstances, no bond will be required

VIII. REQUEST FOR A STAY

The final question involves the request to further stay all proceedings in these actions through the issuance of a new Record of Decision in connection with the remand or December 20, 2024, whichever is sooner. (Doc. 482 at 21–23.) This time is designed in part to allow Federal Defendants to conserve resources needed to complete the revisions to the BiOps on remand, which is now targeted for late 2024. (*See id.* at 22.) The 2022 and 2023 IOP Orders found that a stay was appropriate under *Landis v. N. Am. Co.*, 299 U.S. 248, 254 (1936). (*See* 2023 IOP Order at 78–79. That reasoning and conclusion remains valid and no party seriously contests the stay request or the parameters for expiration. Nothing precluded or precludes a party from seeking injunctive relief during the pendency of a stay. The request for a stay is **GRANTED**.

IX. CONCLUSION

For the reasons explained above:

(1) Federal Defendants' and State Plaintiffs' motion for an order extending the IOP as modified as interim injunctive relief through December 20, 2024, (Doc. 482), is GRANTED IN PART as set forth above.[30]

a. To ensure compliance with and appropriate opportunities for review of the Court's order imposing the IOP, Federal Defendants shall file on the docket of these cases a copy of the draft and final TMPs for 2024, along with a justification for any planned departures from the IOP's temperature targets.

[30] Federal Defendants are directed to forthwith submit a word processing version of the proposed order adopting the IOP to the Court for signature. The Court will entertain language therein that provides a reasonable period of time for Reclamation and DWR to transition away from Reclamation implementing State ITP Condition of Approval 8.4.2.

(2) PCFFA's request for alternative/separate injunctive relief (Doc. 492) is DENIED.

(3) Federal Defendants' motion to strike the requested amendment to the IOP included in the DEFENDANT INTERVENORS' reply brief (Doc. 508) is DENIED AS MOOT.

(4) Federal Defendants' and State Plaintiffs' request for a stay of these cases through December 31, 2023 is GRANTED.

The parties are directed to communicate with one another regularly throughout the remainder of WY 2024 and to file a joint status report with the court *at least* 45 days in advance of the expiration of the stay, or earlier if the parties conclude it is necessary, informing the Court of the need for further proceedings in these actions.

IT IS SO ORDERED.

Dated: **March 28, 2024**

Jennifer L. Thurston
UNITED STATES DISTRICT JUDGE